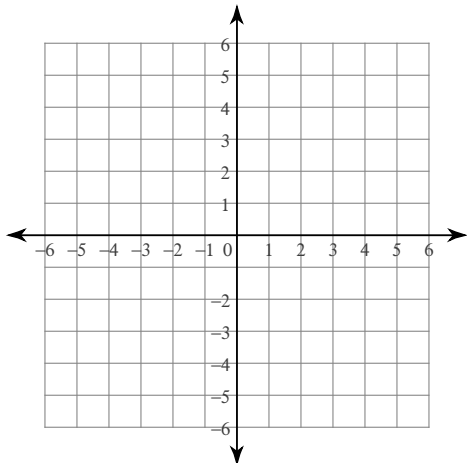


ALL ABOUT LINEAR EQUATIONS

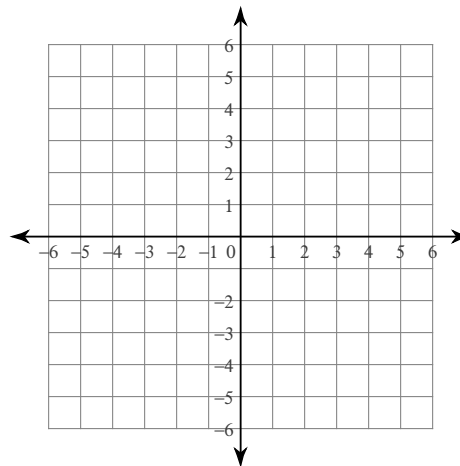
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Sketch the graph of each line.

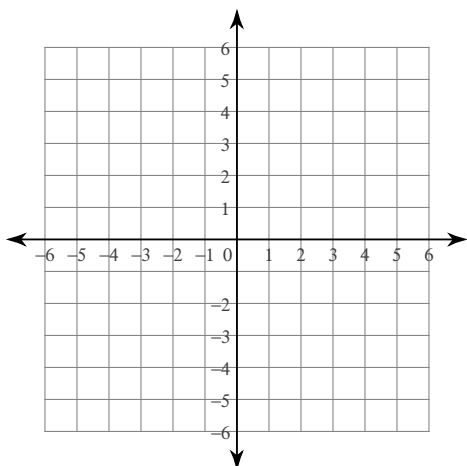
1) $y = -6x - 3$



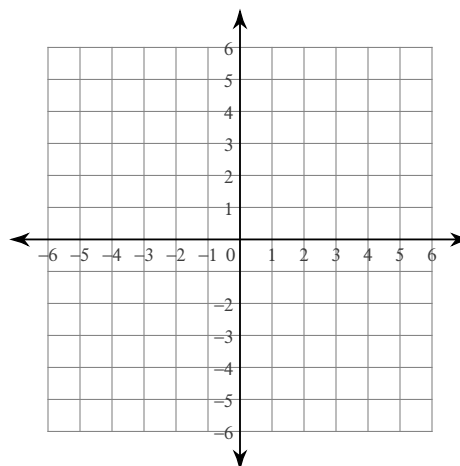
2) $y = \frac{8}{5}x + 4$



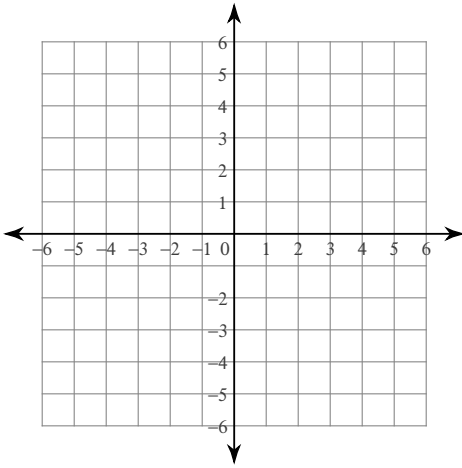
3) $y = -\frac{1}{5}x - 3$



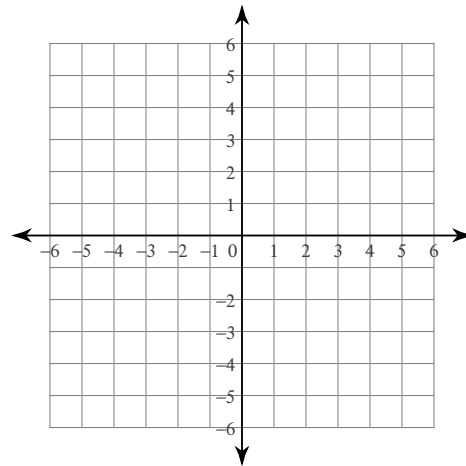
4) $y = -\frac{9}{4}x - 5$



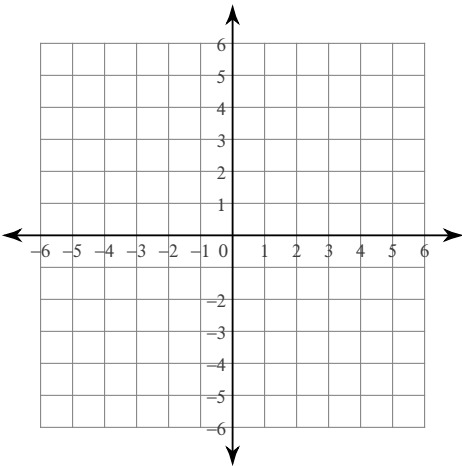
5) $y = -1$



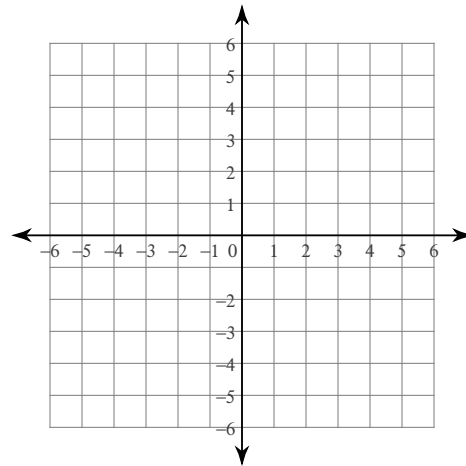
6) $y = -\frac{1}{5}x + 2$



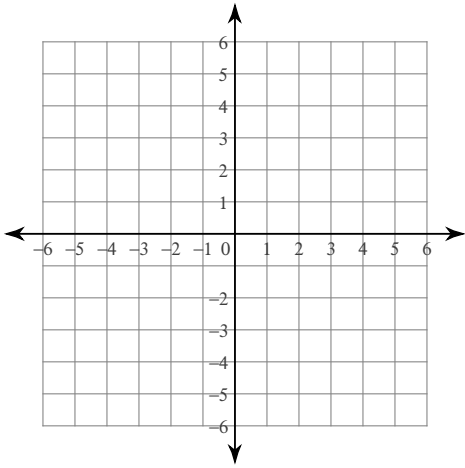
7) $y = \frac{5}{3}x$



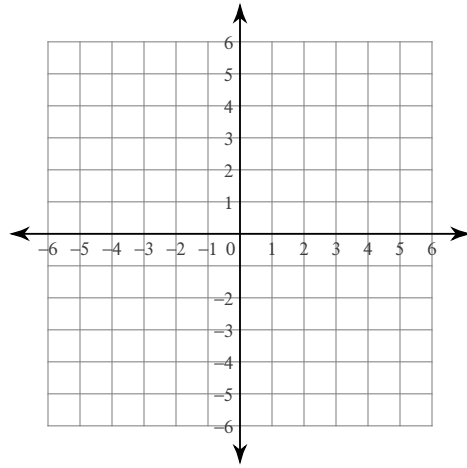
8) $y = -\frac{1}{2}x + 1$



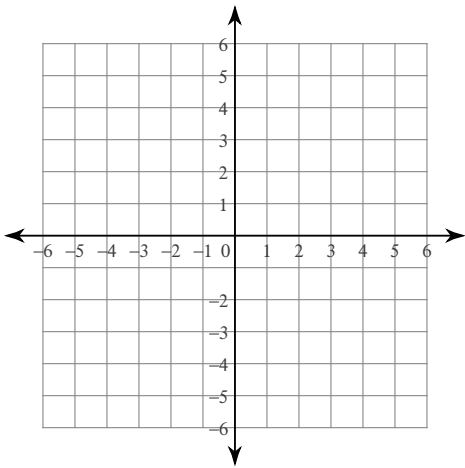
9) $y = -4x + 3$



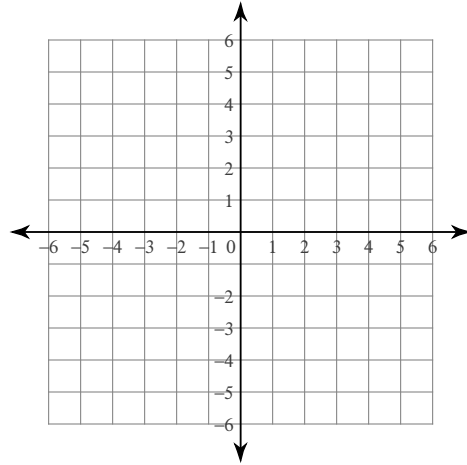
10) $y = -5x + 5$



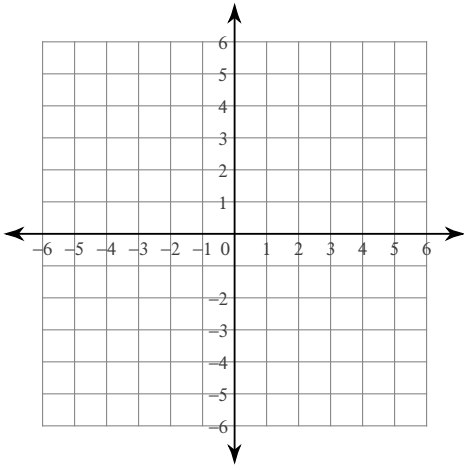
11) $y = -\frac{3}{2}x - 1$



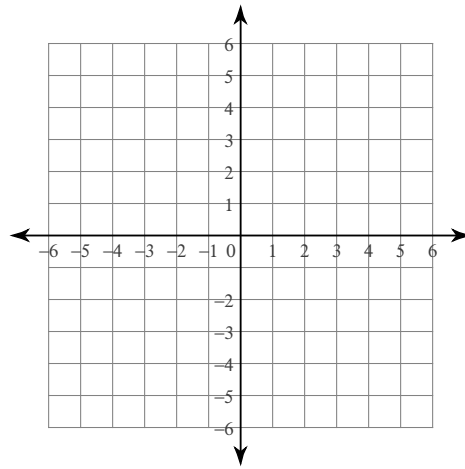
12) $y = 2x - 4$



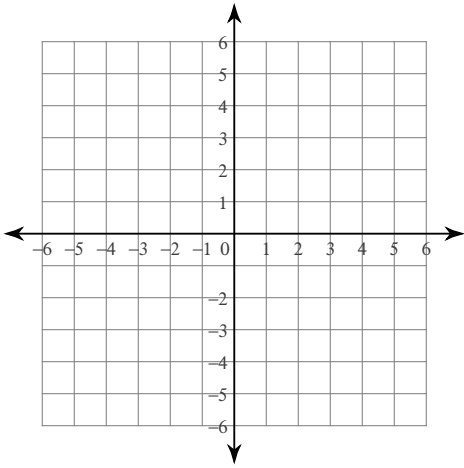
13) $x = 2$



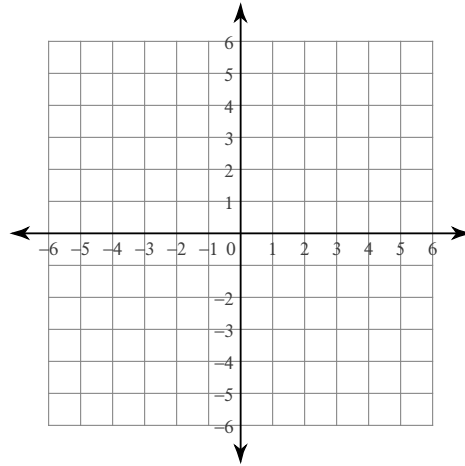
14) $y = \frac{3}{5}x + 2$



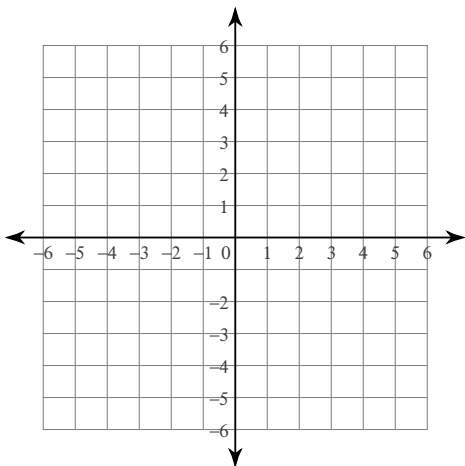
15) $y = -5x$



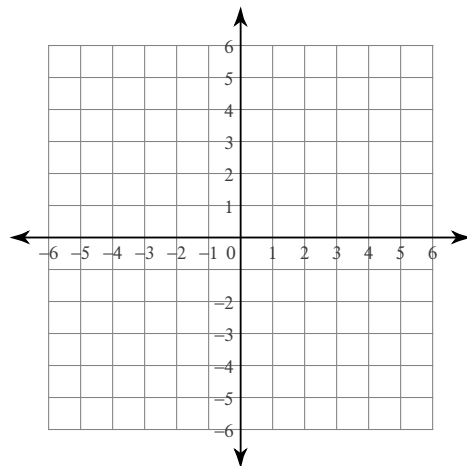
16) $y = \frac{1}{3}x - 4$



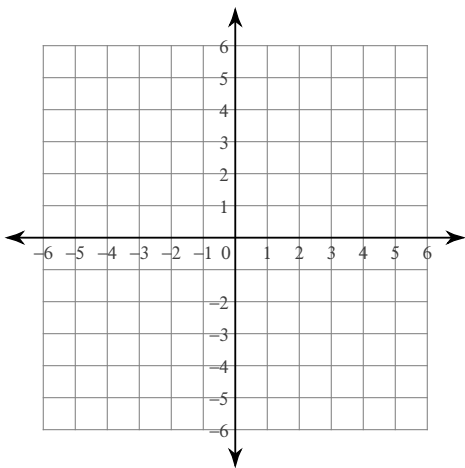
17) $y = \frac{1}{4}x + 5$



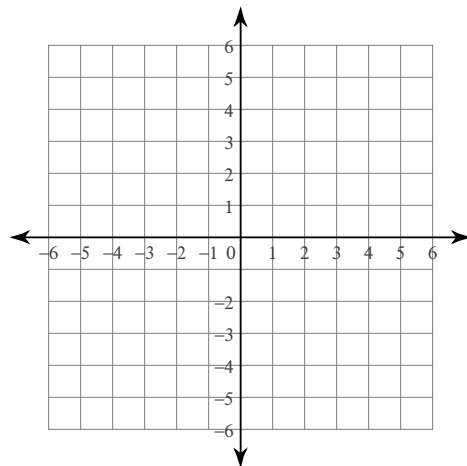
18) $y = \frac{8}{5}x - 5$



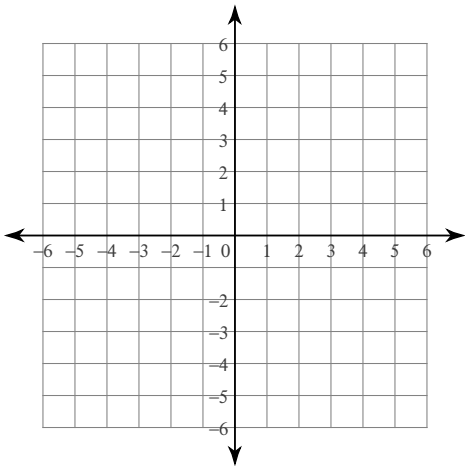
19) $y = x - 2$



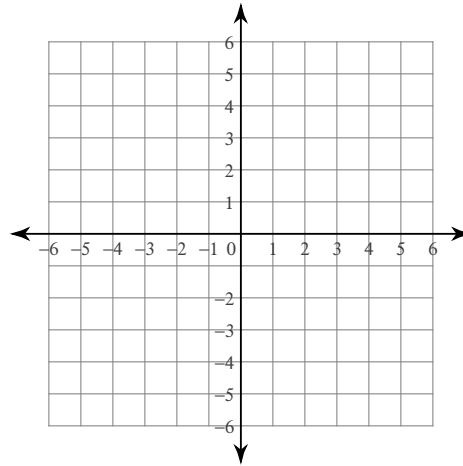
20) $y = \frac{2}{3}x + 3$



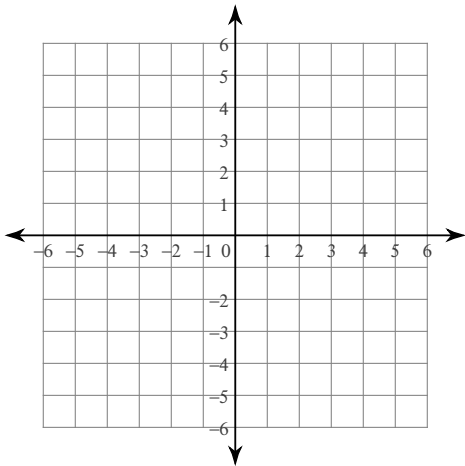
21) $y = -\frac{4}{3}x + 4$



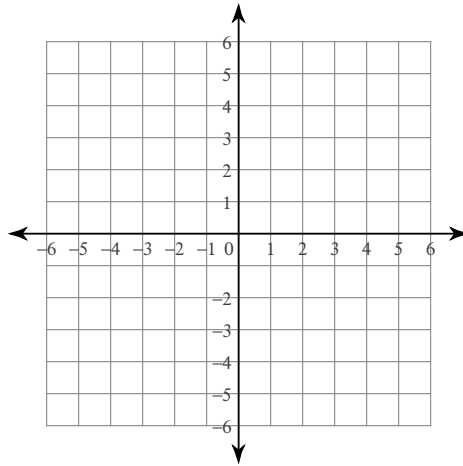
22) $y = 5$



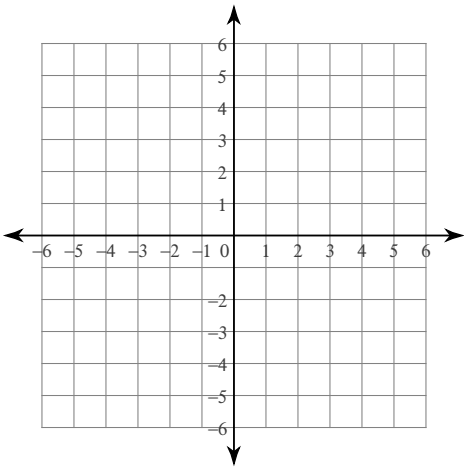
23) $y = \frac{1}{4}x + 2$



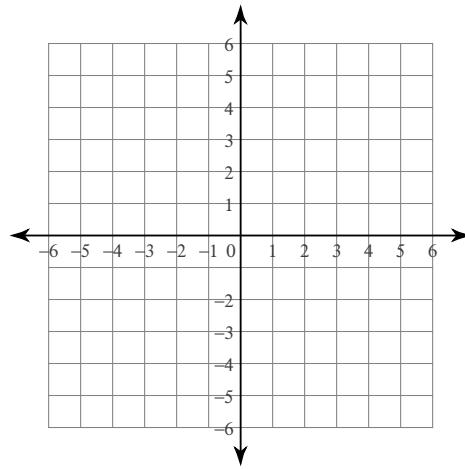
24) $y = 2x - 3$



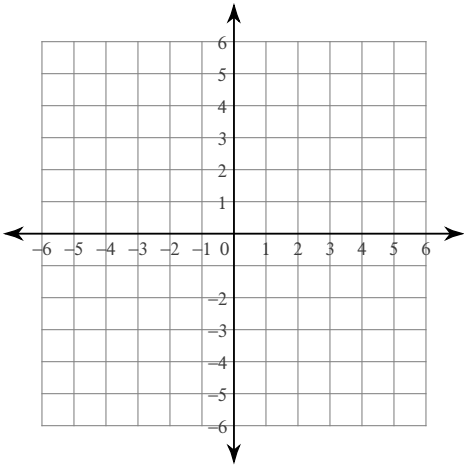
$$25) y = -\frac{1}{5}x + 4$$



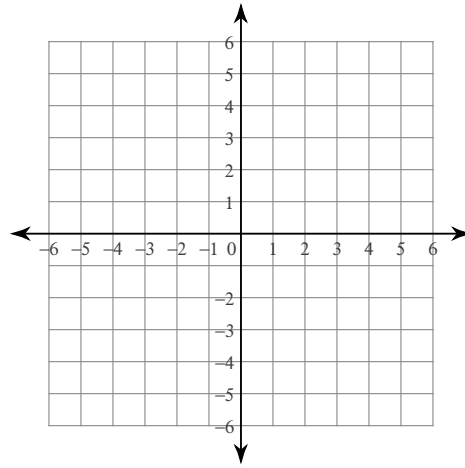
$$26) y = \frac{1}{2}x + 5$$



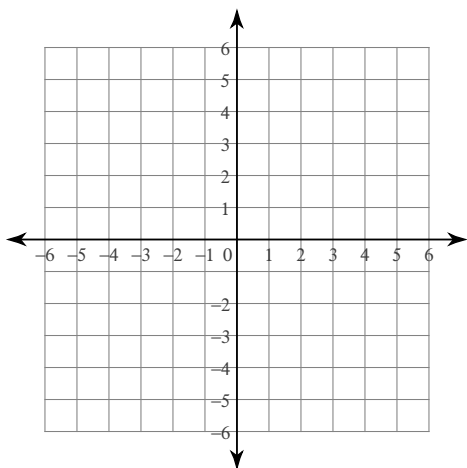
$$27) y = -3x - 4$$



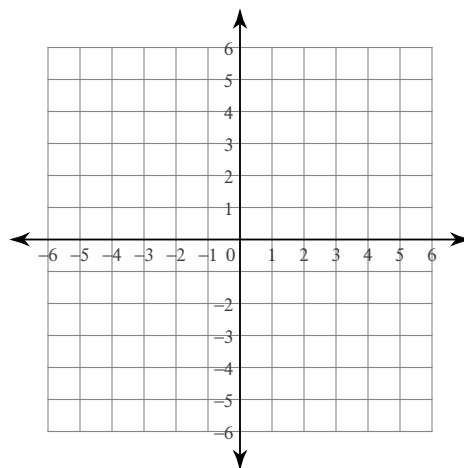
$$28) y = x$$



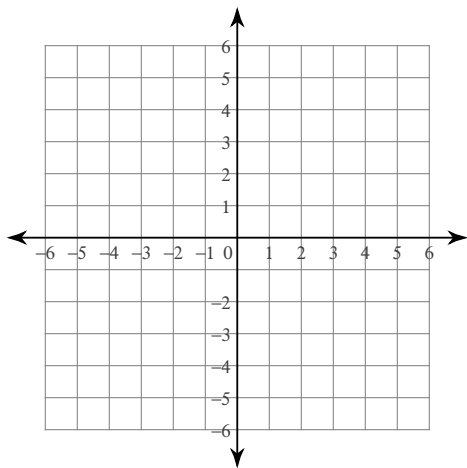
29) $y = -\frac{3}{4}x + 2$



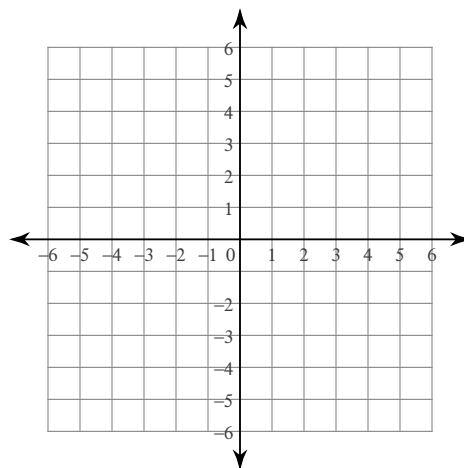
30) $y = -\frac{4}{3}x - 5$



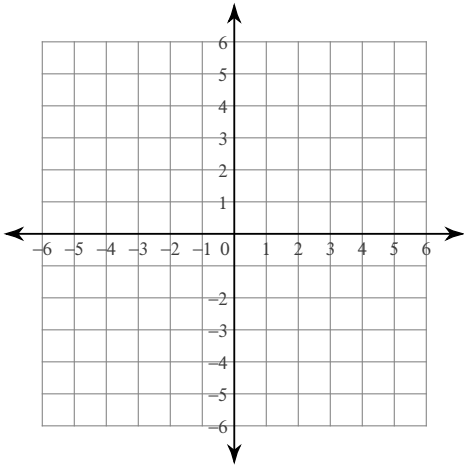
31) $y = 4x + 1$



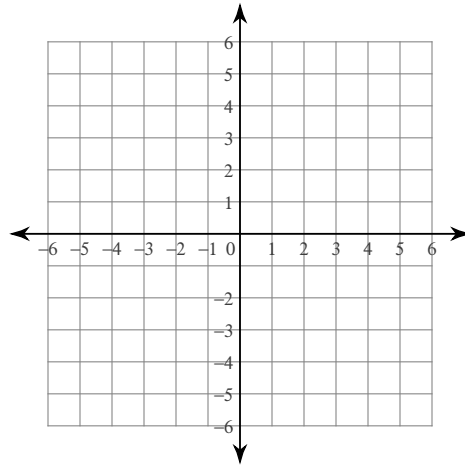
32) $y = -\frac{4}{3}x - 2$



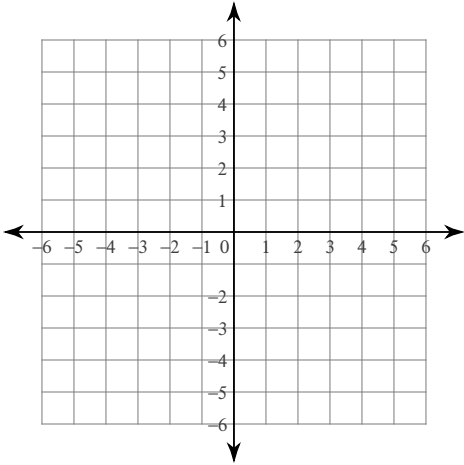
33) $y = 2x - 5$



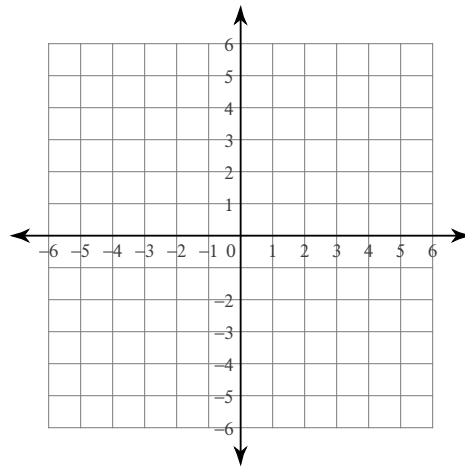
34) $y = -6x - 3$



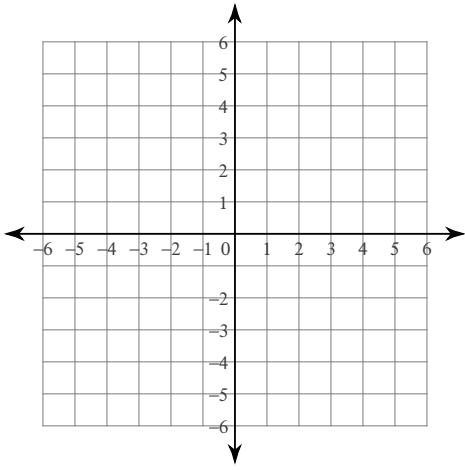
35) $y = -3x - 2$



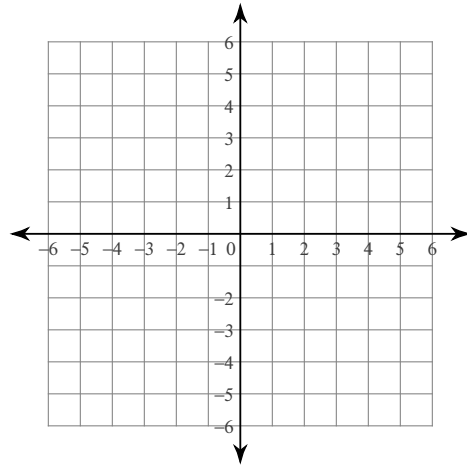
36) $y = \frac{4}{3}x + 5$



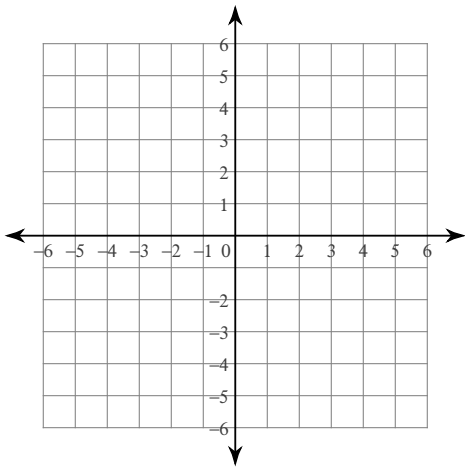
37) $y = -2x + 2$



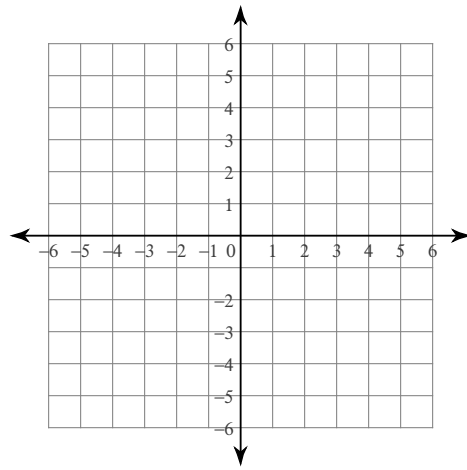
38) $x = -5$



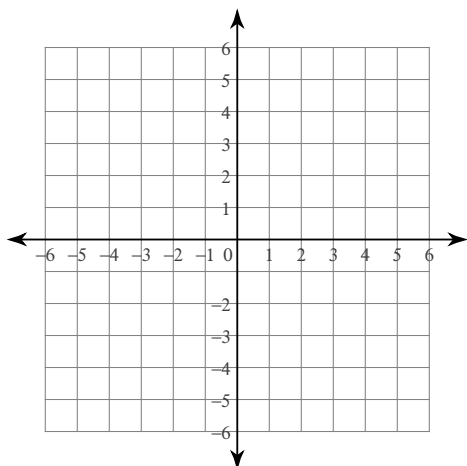
39) $y = \frac{1}{2}x - 1$



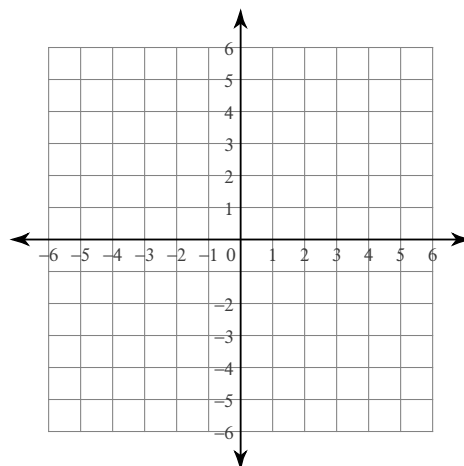
40) $y = \frac{4}{3}x - 2$



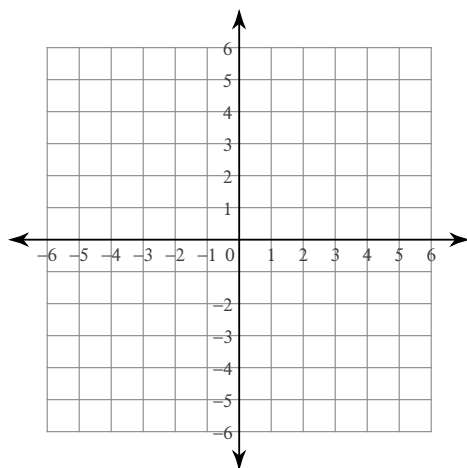
41) $y = \frac{1}{3}x + 3$



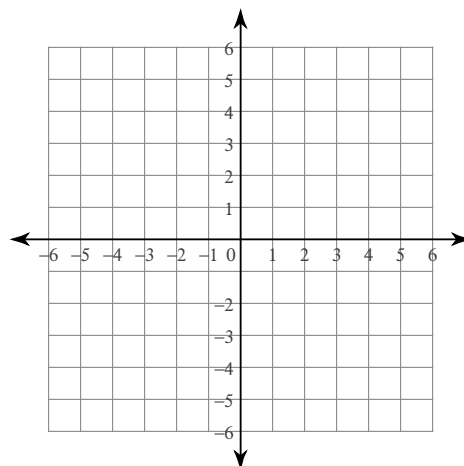
42) $y = \frac{1}{4}x - 3$



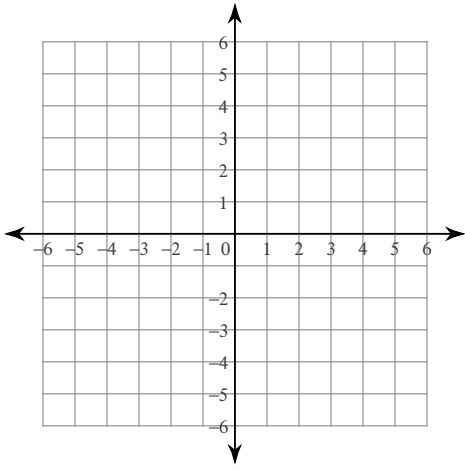
43) $y = -1$



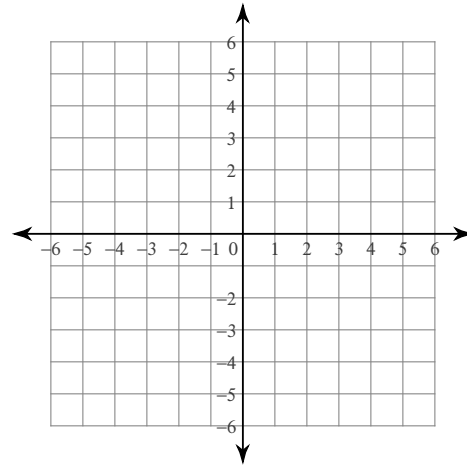
44) $y = \frac{1}{2}x + 4$



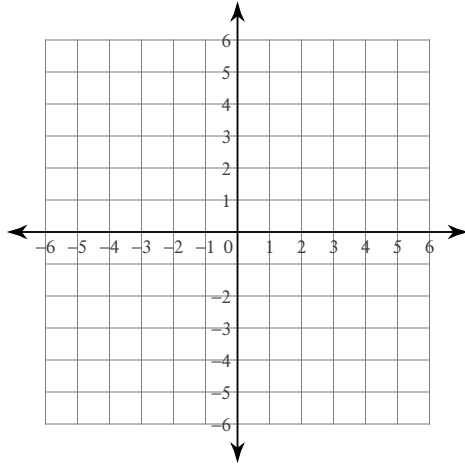
45) $y = -7x - 2$



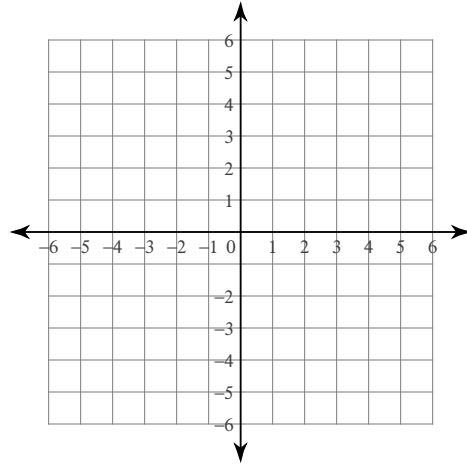
46) $y = 0$



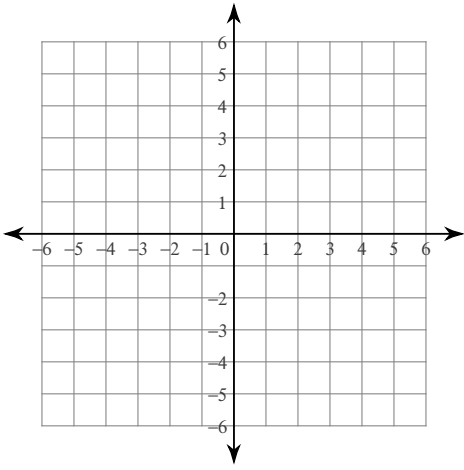
47) $y = 1$



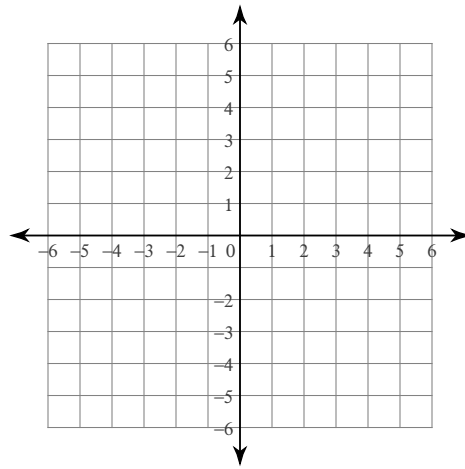
48) $y = 4x + 3$



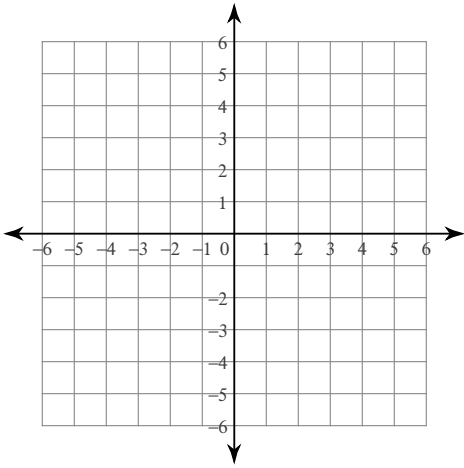
49) $y = -2x + 1$



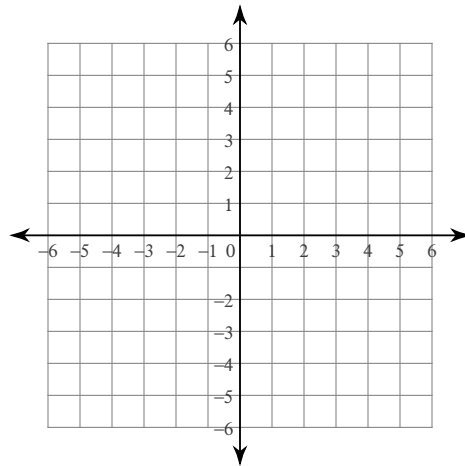
50) $y = -\frac{4}{3}x - 3$



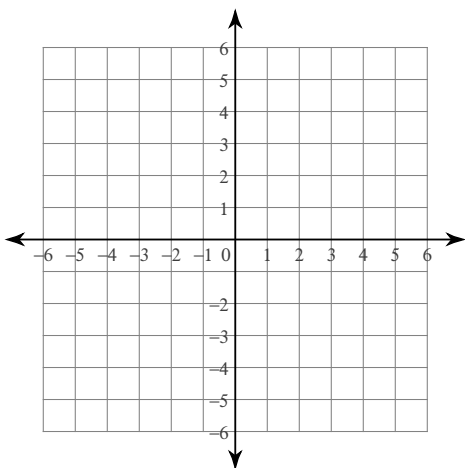
51) $x = -4$



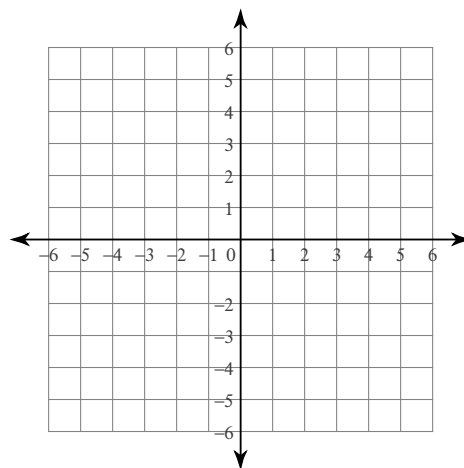
52) $y = -\frac{5}{4}x + 1$



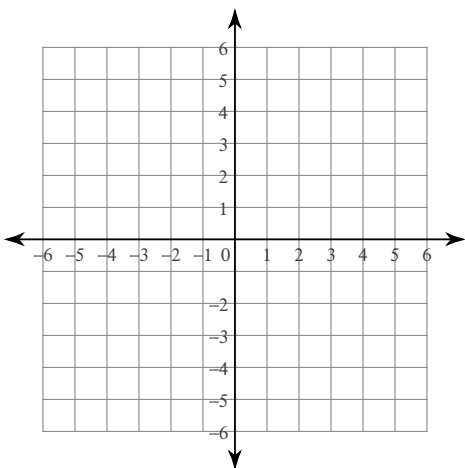
$$53) y = \frac{2}{3}x + 4$$



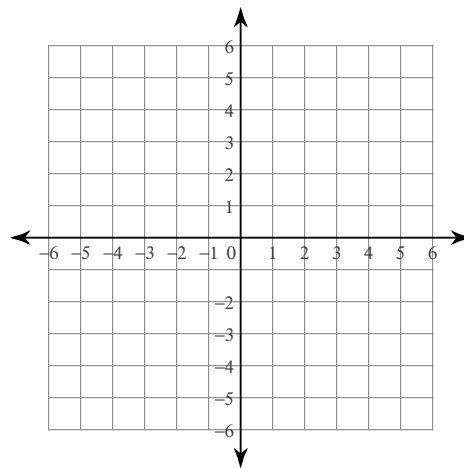
$$54) y = \frac{1}{2}x + 1$$



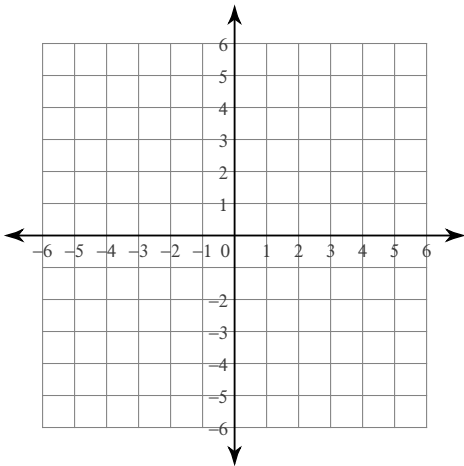
$$55) y = -\frac{1}{2}x + 1$$



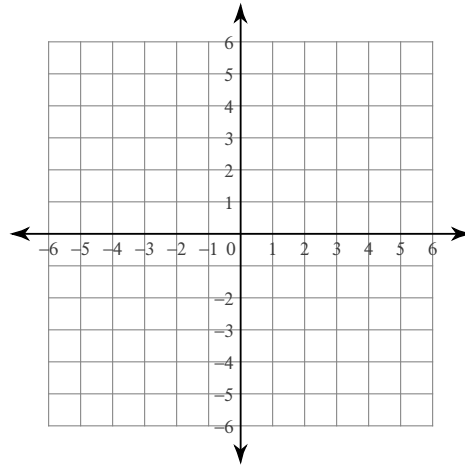
$$56) x = 5$$



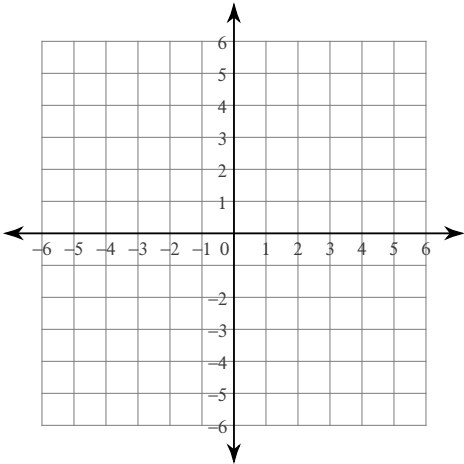
57) $y = \frac{2}{5}x$



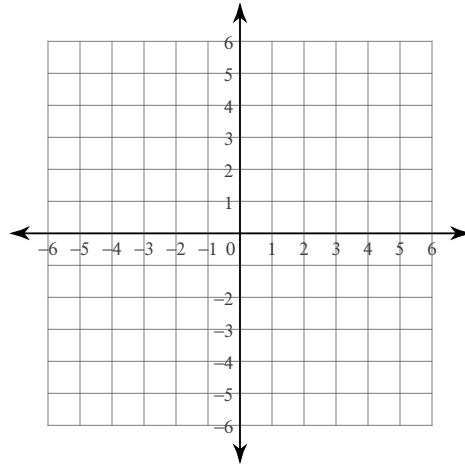
58) $y = 4x - 3$



59) $y = -\frac{7}{2}x - 2$



60) $y = -\frac{6}{5}x - 2$



Write the slope-intercept form of the equation of each line given the slope and y-intercept.

61) Slope = $\frac{5}{2}$, y-intercept = 4

62) Slope = $\frac{5}{2}$, y-intercept = -4

63) Slope = 0, y-intercept = -3

64) Slope = 1, y-intercept = 4

65) Slope = $-\frac{7}{2}$, y-intercept = -2

66) Slope = $\frac{1}{3}$, y-intercept = -5

67) Slope = -7, y-intercept = -3

68) Slope = $\frac{3}{2}$, y-intercept = 3

69) Slope = $-\frac{3}{4}$, y-intercept = 2

70) Slope = $\frac{1}{2}$, y-intercept = -3

Write the slope-intercept form of the equation of the line through the given point with the given slope.

71) through: (5, 2), slope = $\frac{1}{2}$

72) through: (3, -4), slope = -2

73) through: (-5, 0), slope = 1

74) through: (-2, -3), slope = -6

75) through: (2, 2), slope = $-\frac{3}{2}$

76) through: (3, -4), slope = -3

77) through: (-2, 0), slope = $\frac{1}{5}$

78) through: (3, 1), slope = $-\frac{1}{3}$

79) through: (5, 2), slope = $-\frac{3}{5}$

80) through: (2, -5), slope = $-\frac{1}{7}$

Write the standard form of the equation of the line described.

81) through: (2, 3), perp. to $y = x - 2$

82) through: (-2, -4), perp. to $y = -\frac{1}{4}x - 4$

83) through: (-1, -4), perp. to $y = -\frac{1}{9}x$

84) through: (0, -2), perp. to $y = \frac{1}{2}x + 5$

85) through: (4, 2), perp. to $y = -x + 5$

86) through: (-4, 5), perp. to $y = \frac{4}{5}x + 1$

87) through: (1, -4), perp. to $y = -x - 4$

88) through: $(-3, -1)$, perp. to $y = \frac{1}{6}x$

89) through: $(-3, 1)$, perp. to $y = \frac{1}{2}x + 5$

90) through: $(4, -2)$, perp. to $y = -4x + 5$

91) through: $(-2, 1)$, perp. to $y = \frac{2}{3}x$

92) through: $(-5, -1)$, perp. to $y = \frac{10}{3}x - 4$

93) through: $(1, -5)$, perp. to $y = x$

94) through: $(3, -1)$, perp. to $y = \frac{1}{2}x - 4$

95) through: $(-2, -2)$, perp. to $y = -\frac{2}{3}x + 5$

96) through: $(-3, 0)$, perp. to $y = \frac{3}{2}x - 1$

97) through: $(-4, -4)$, perp. to $y = -6x + 3$

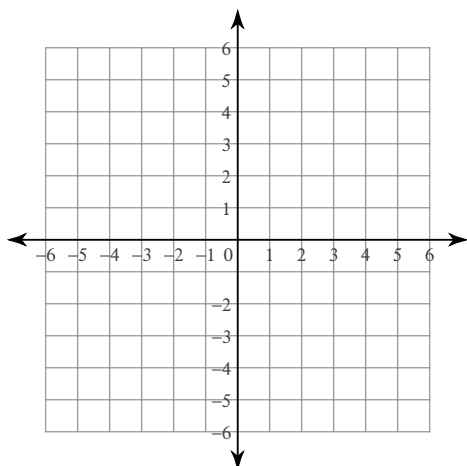
98) through: $(2, -1)$, perp. to $y = -x - 4$

99) through: $(1, 1)$, perp. to $y = -x + 2$

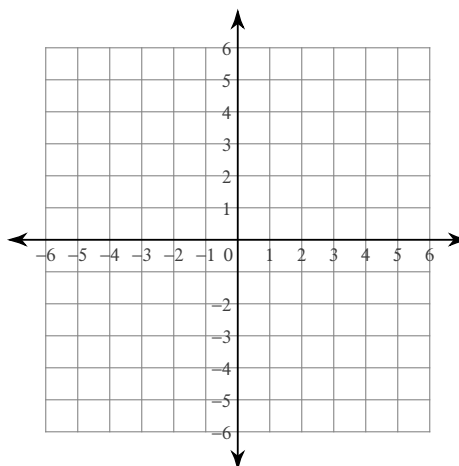
100) through: $(5, 5)$, perp. to $y = -\frac{5}{7}x - 4$

Graph each equation.

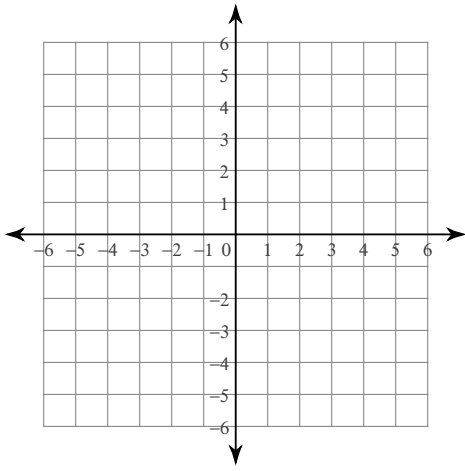
101) $y = |x| + 2$



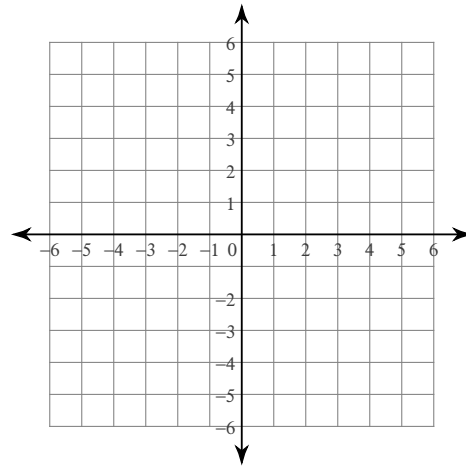
102) $y = |x + 4|$



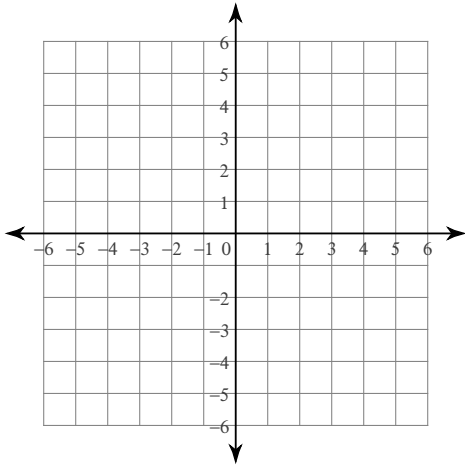
$$103) y = |x - 3|$$



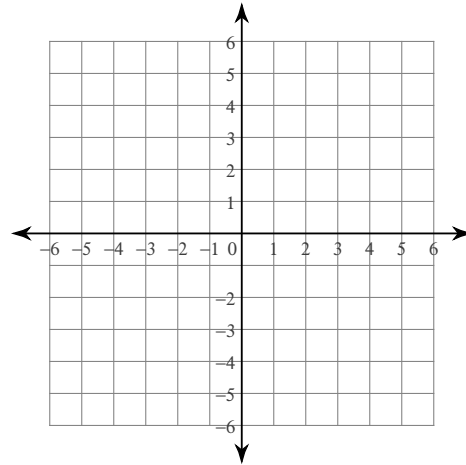
$$104) y = |x| - 2$$



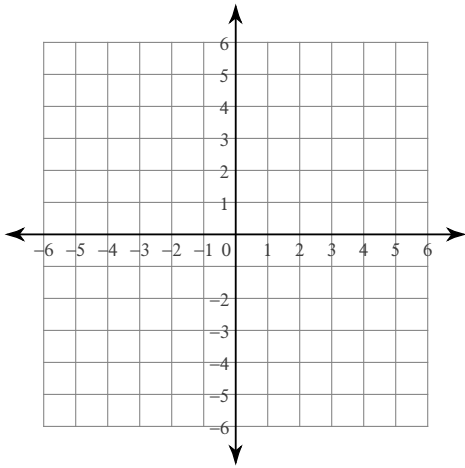
$$105) y = |x + 3|$$



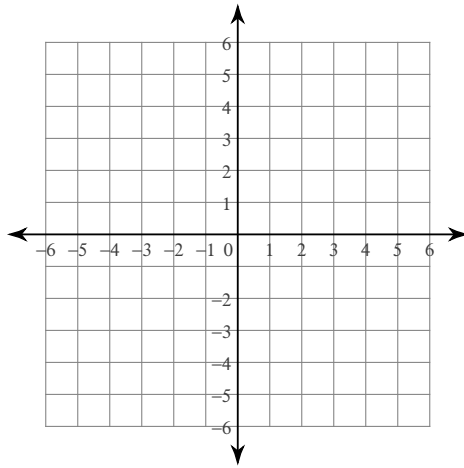
$$106) y = |x - 2|$$



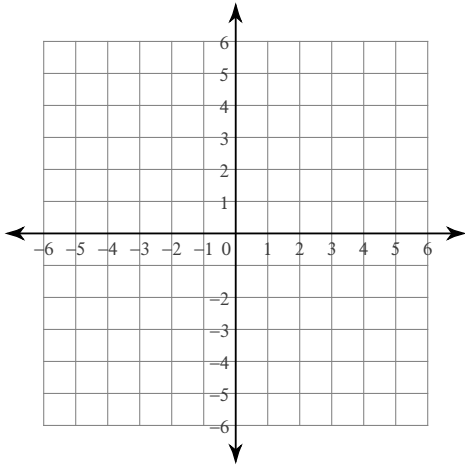
$$107) y = |x - 1|$$



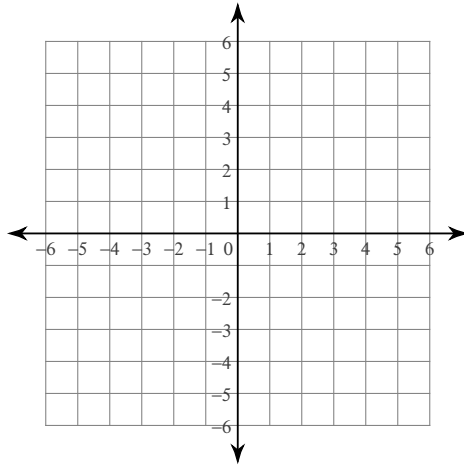
$$108) y = |x| - 1$$



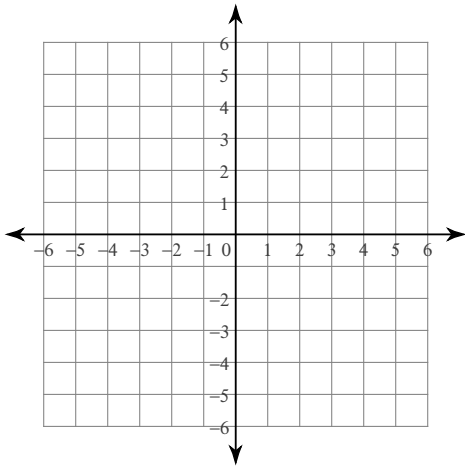
$$109) y = |x - 4|$$



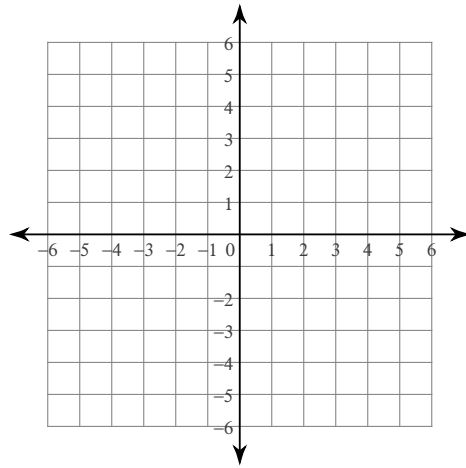
$$110) y = |x| - 3$$



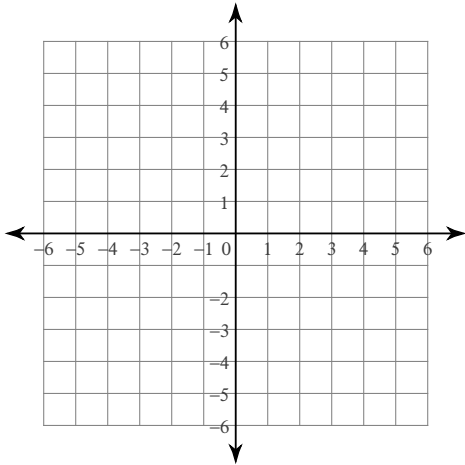
$$111) y = |x + 1|$$



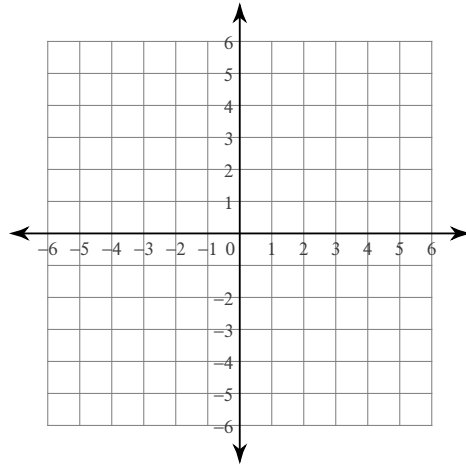
$$112) y = |x| + 1$$



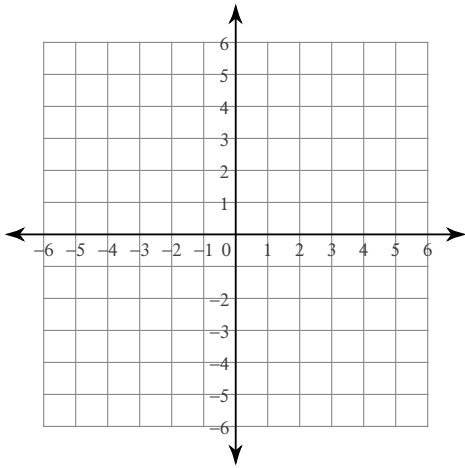
$$113) y = |x| - 4$$



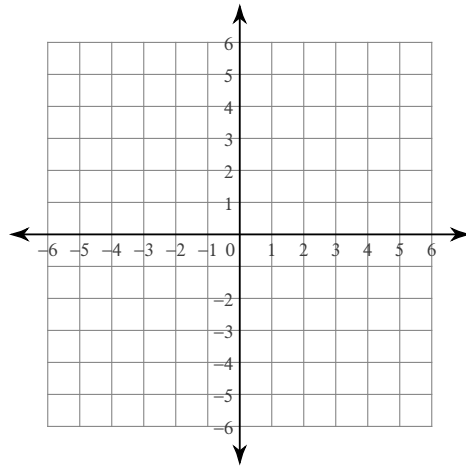
$$114) y = |x| + 3$$



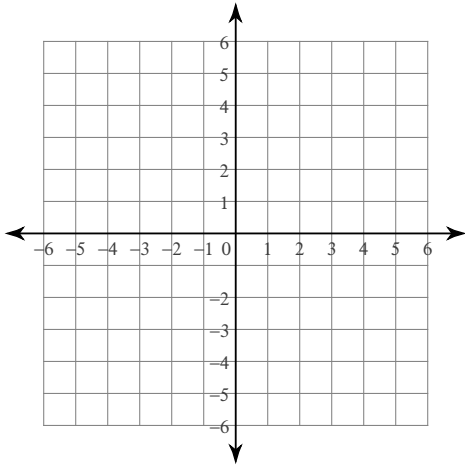
$$115) y = |x + 2|$$



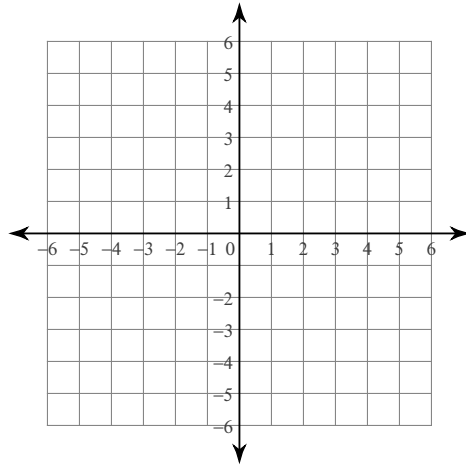
$$116) y = |x| + 4$$



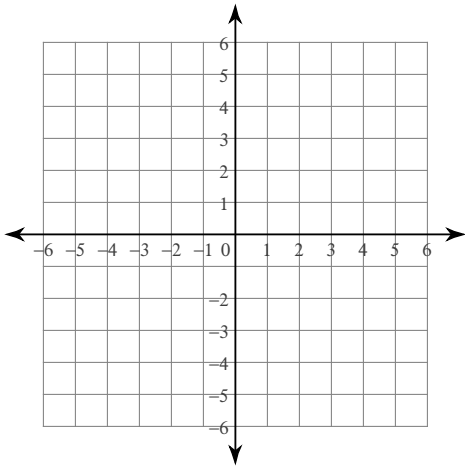
$$117) y = |x| - 3$$



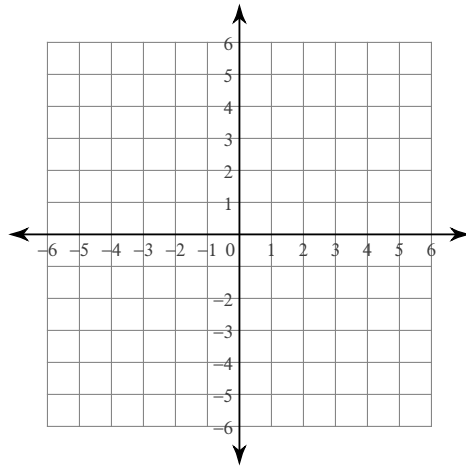
$$118) y = |x + 1| + 4$$



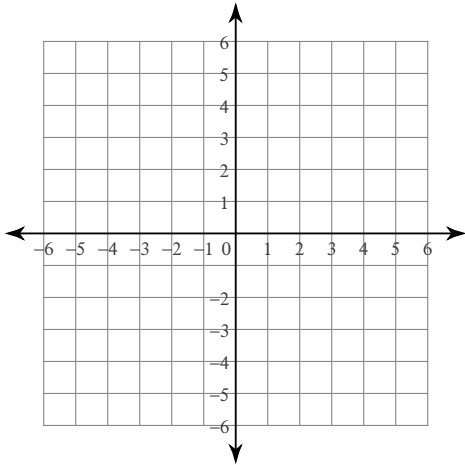
119) $y = |x + 2| + 4$



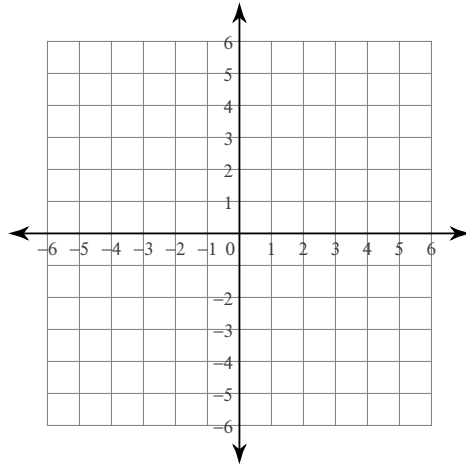
120) $y = |x + 1| + 1$



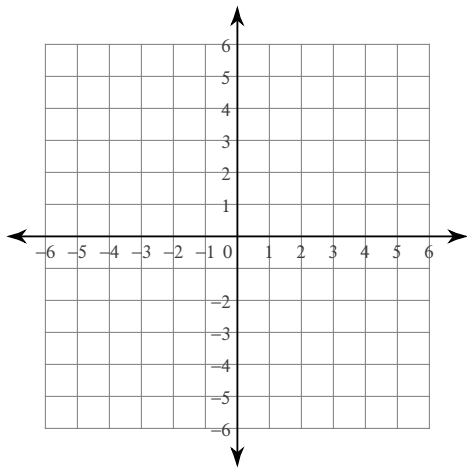
121) $y = |x + 3|$



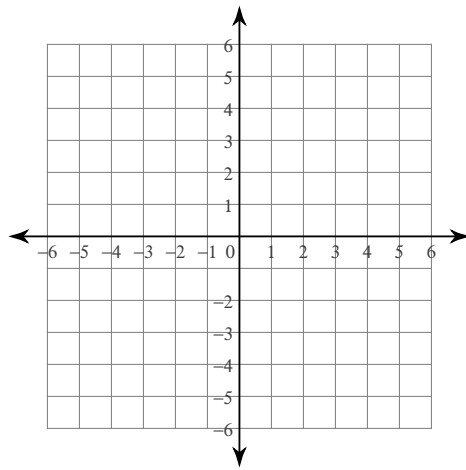
122) $y = |x - 4| - 1$



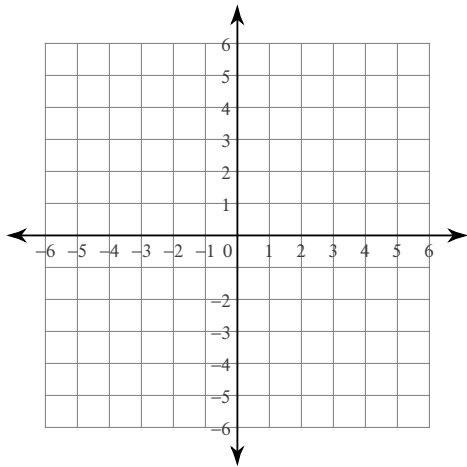
$$123) y = |x - 2| - 3$$



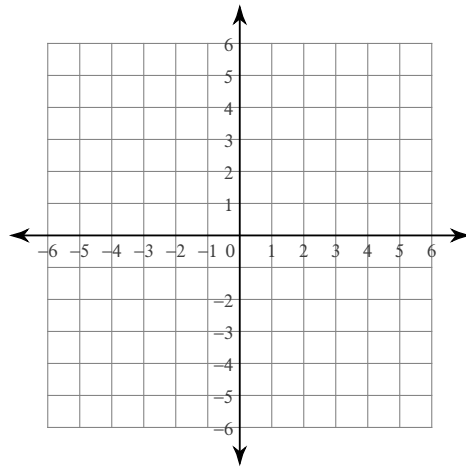
$$124) y = |x + 3| - 4$$



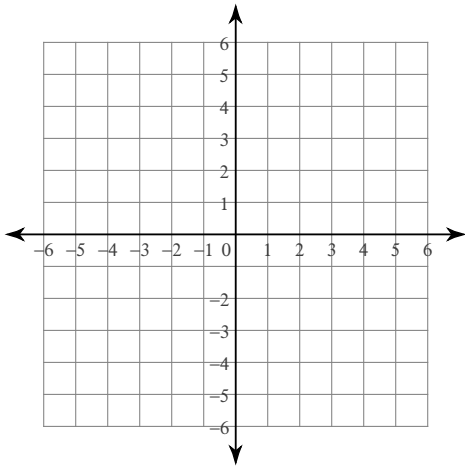
$$125) y = |x - 1| - 3$$



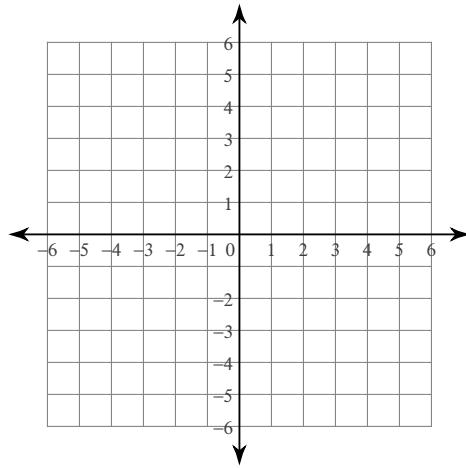
$$126) y = |x - 4|$$



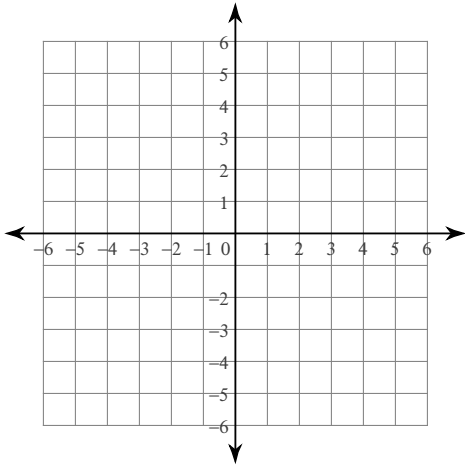
$$127) y = |x + 2|$$



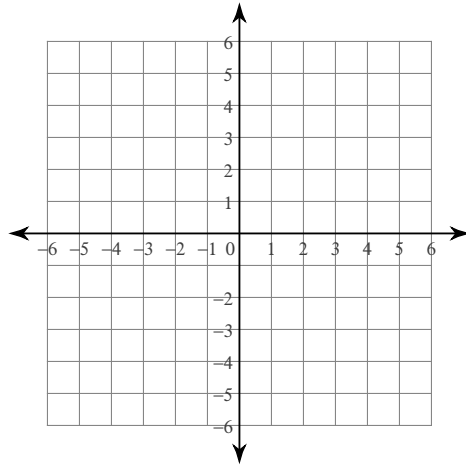
$$128) y = |x - 4| - 3$$



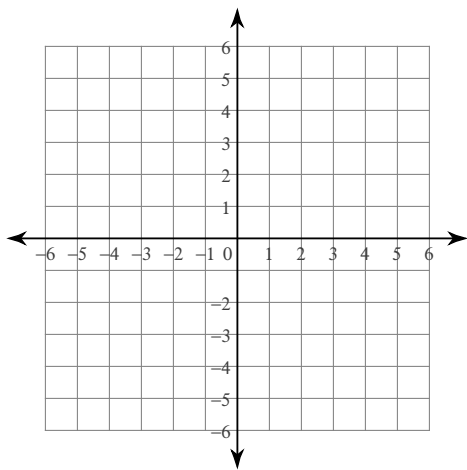
$$129) y = |x + 4| + 3$$



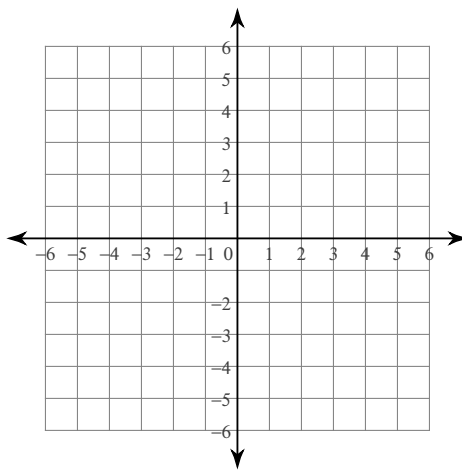
$$130) y = |x + 4| - 3$$



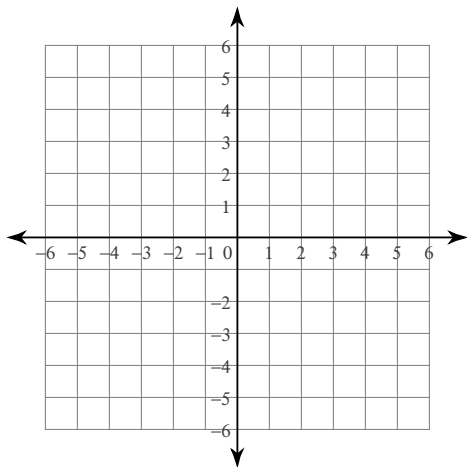
$$131) y = |x - 4| + 1$$



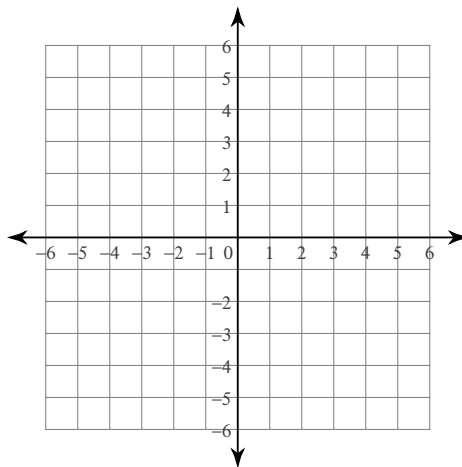
$$132) y = |x - 4| + 4$$



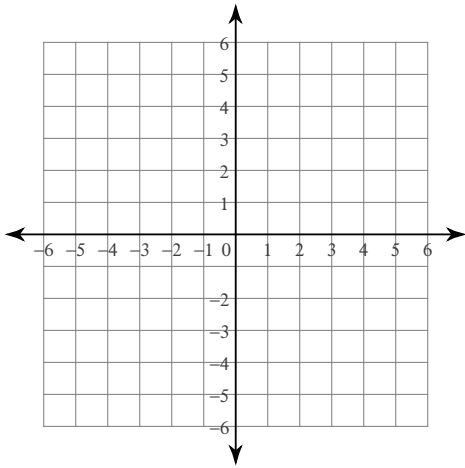
$$133) y = |x + 1| - 2$$



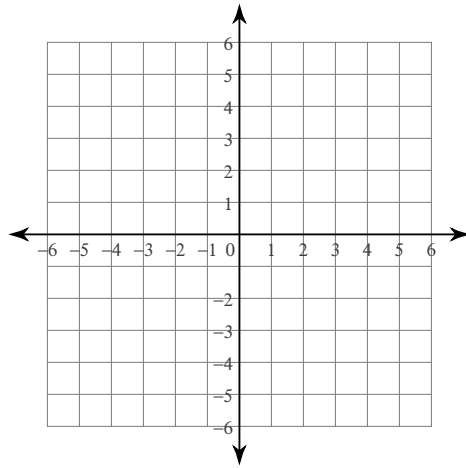
$$134) y = |x| + 1$$



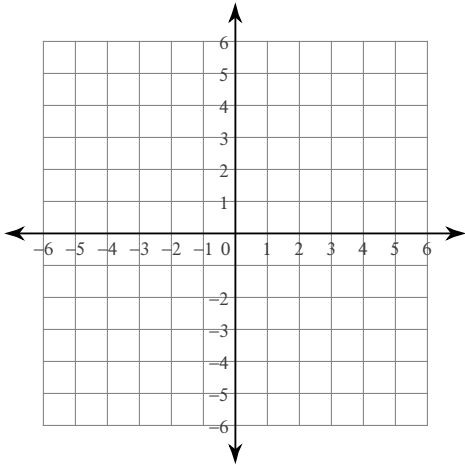
$$135) y = |x - 2|$$



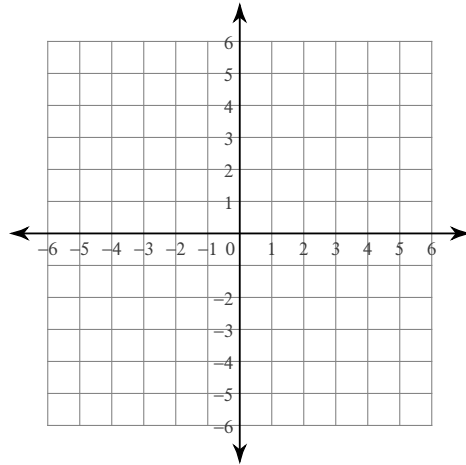
$$136) y = |x - 3| - 4$$



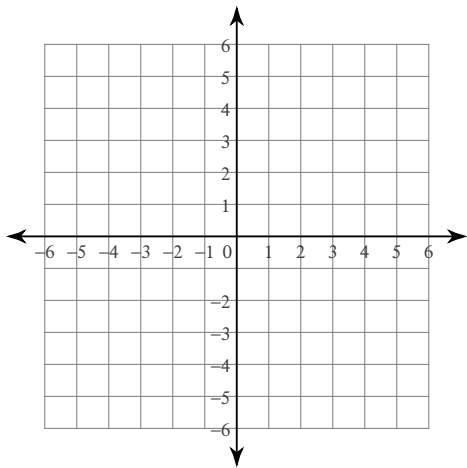
$$137) y = -|x - 4|$$



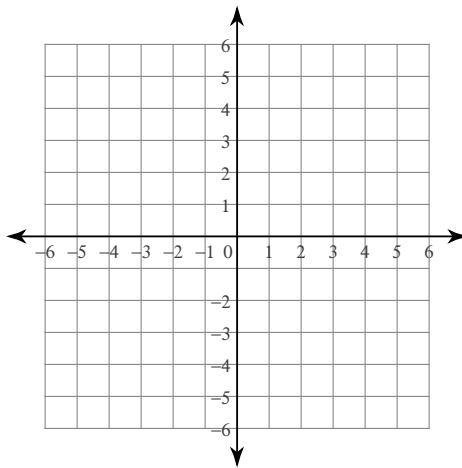
$$138) y = |x| + 1$$



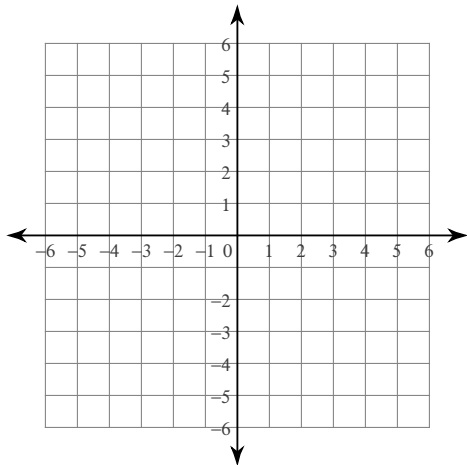
$$139) y = -|x - 1| + 4$$



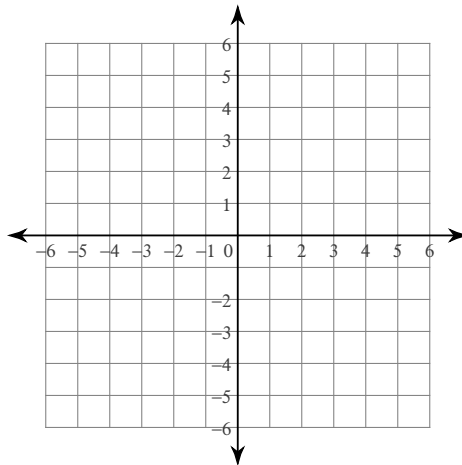
$$140) y = -|x - 4| - 1$$



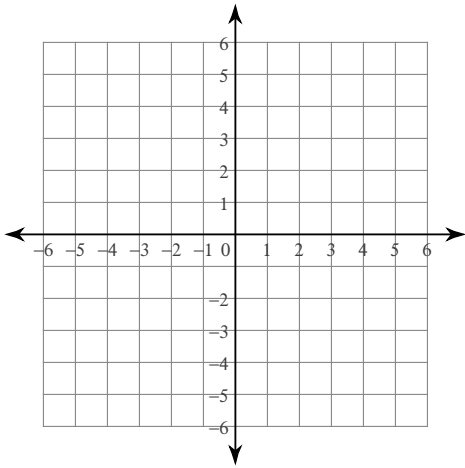
$$141) y = -|x| + 1$$



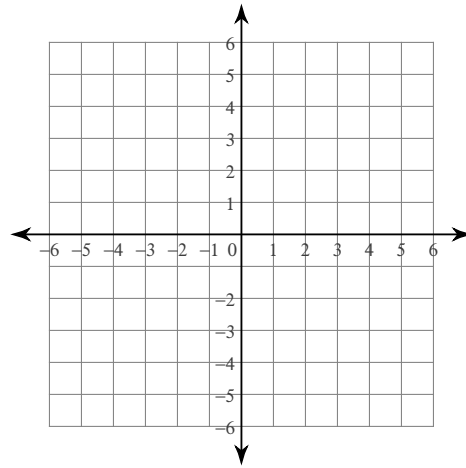
$$142) y = |x| + 4$$



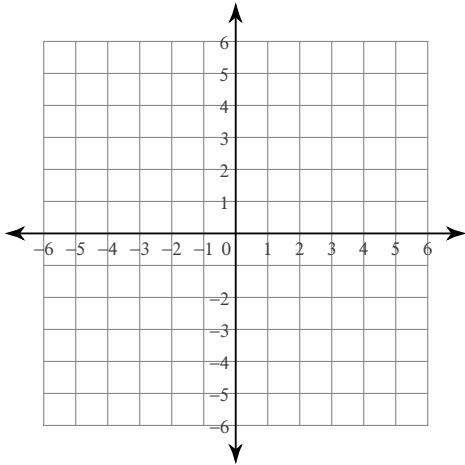
$$143) y = |x - 4| - 3$$



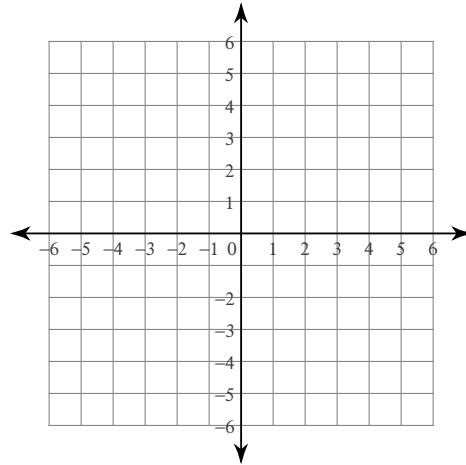
$$144) y = |x + 2| + 1$$



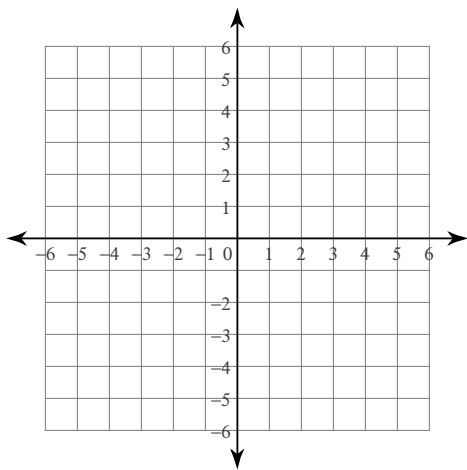
$$145) y = |x| - 3$$



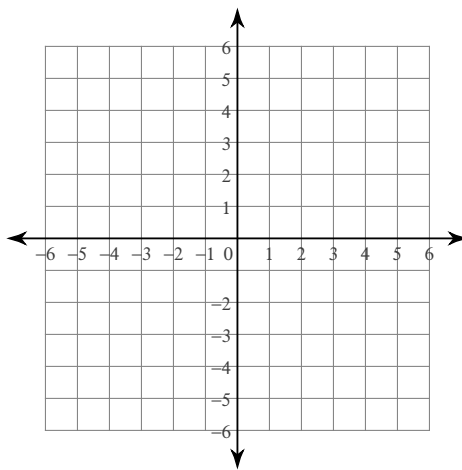
$$146) y = -|x - 4| - 3$$



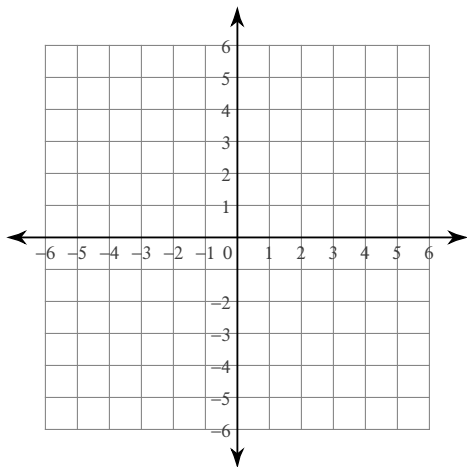
$$147) y = |x + 4| + 3$$



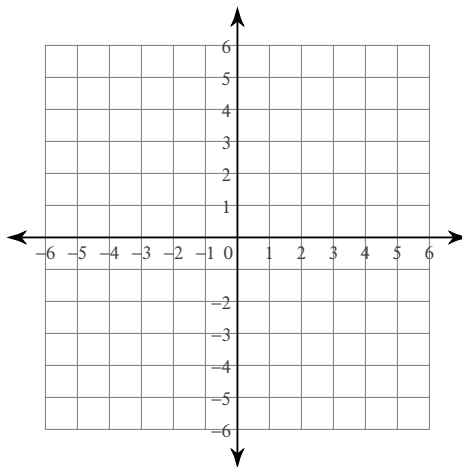
$$148) y = |x - 2| + 3$$



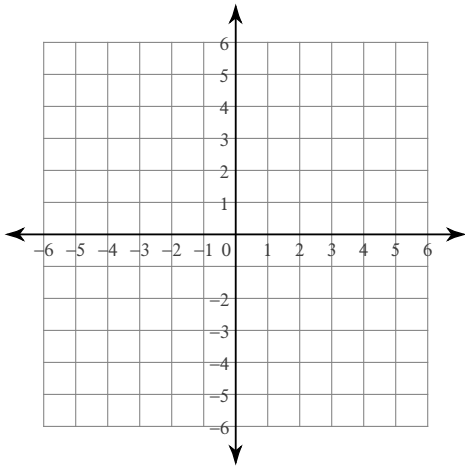
$$149) y = -|x| - 4$$



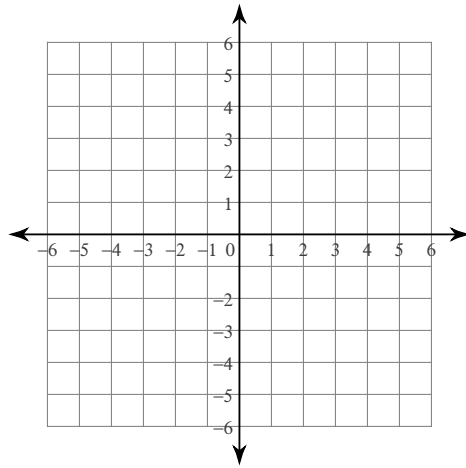
$$150) y = -|x| - 3$$



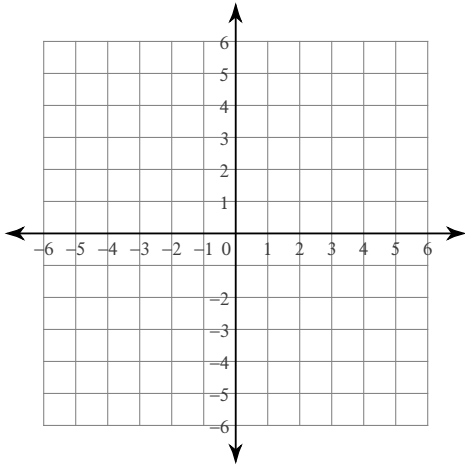
$$151) y = |x + 2|$$



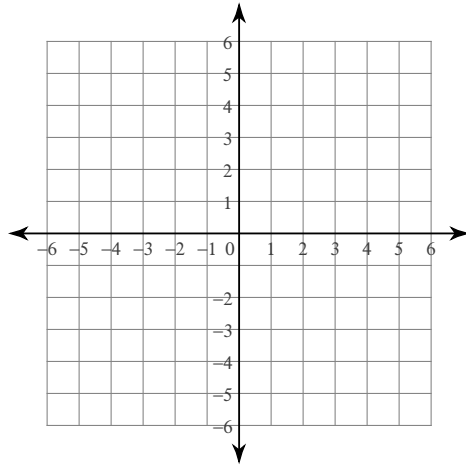
$$152) y = |x - 2| - 3$$



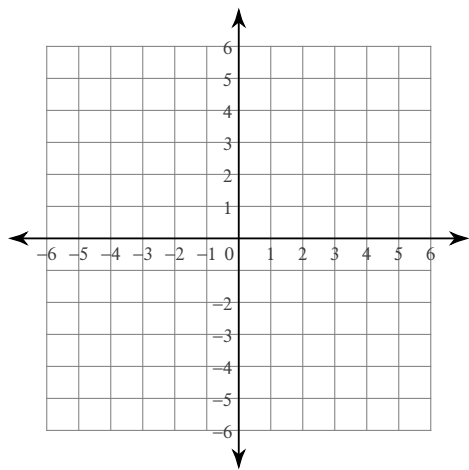
$$153) y = |x| + 3$$



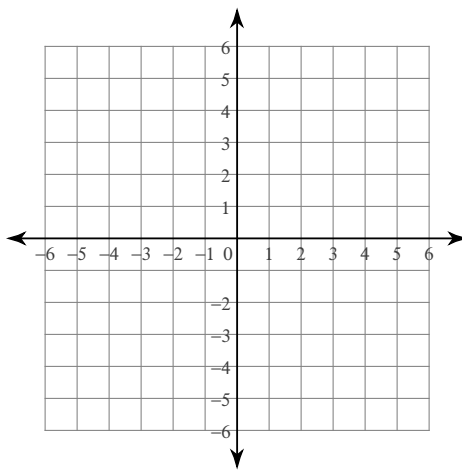
$$154) y = -|x + 3| - 2$$



$$155) y = -|x + 2| + 1$$

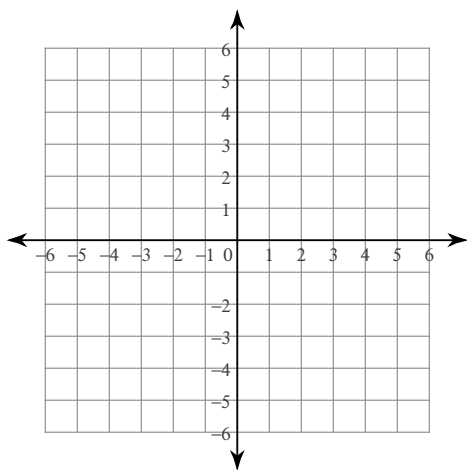


$$156) y = -|x + 2| + 2$$

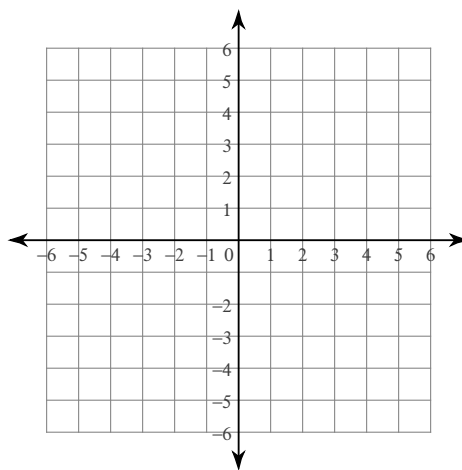


Sketch the graph of each linear inequality.

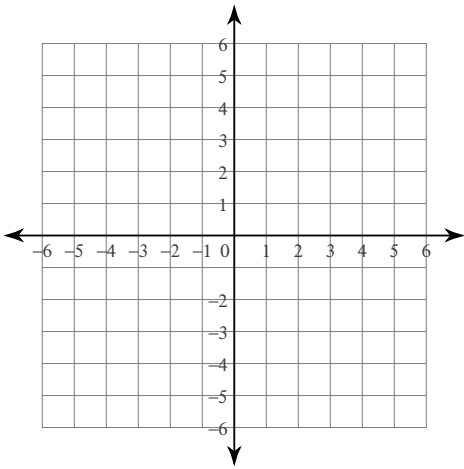
$$157) y \leq \frac{5}{3}x + 1$$



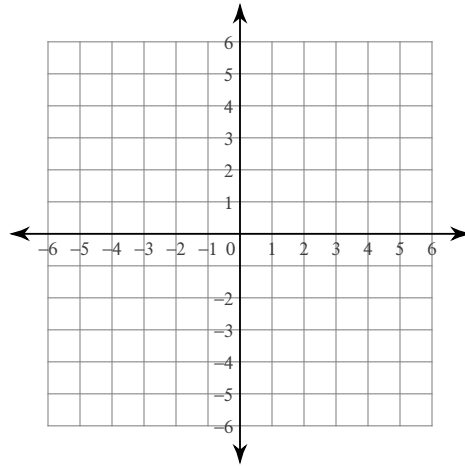
$$158) y > \frac{2}{5}x + 5$$



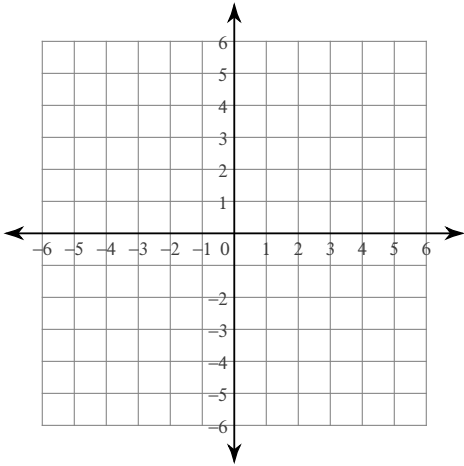
159) $y > \frac{3}{2}x + 3$



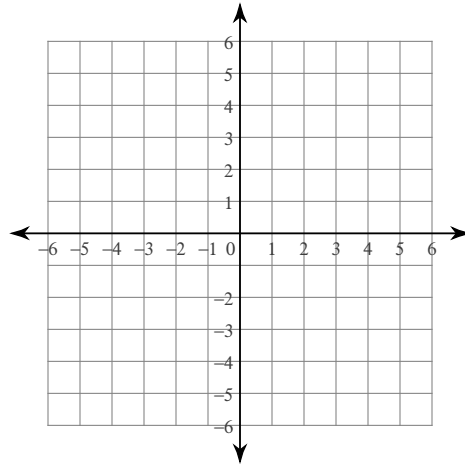
160) $y \geq -5x - 1$



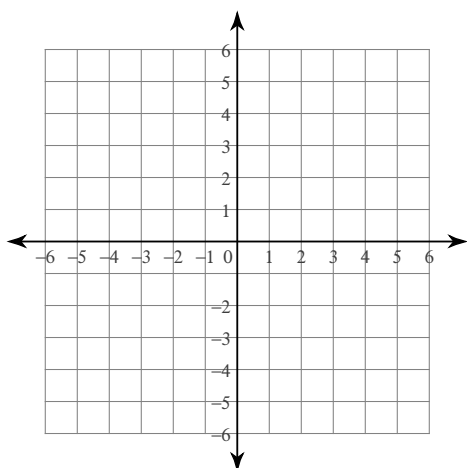
161) $y > \frac{1}{4}x - 2$



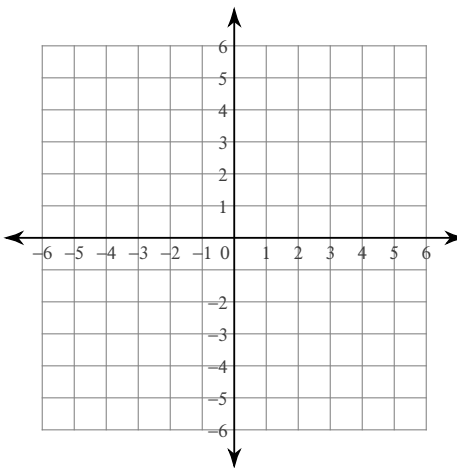
162) $y \leq -\frac{8}{5}x + 5$



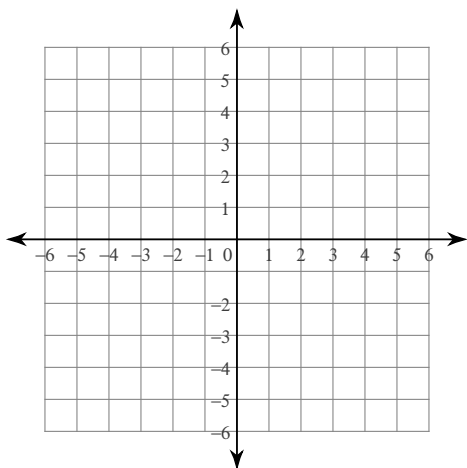
$$163) y > \frac{1}{3}x - 1$$



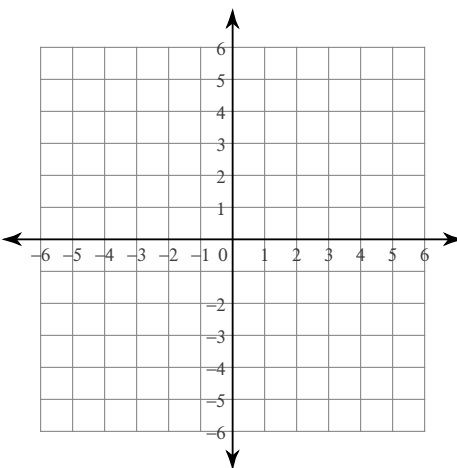
$$164) y < -2$$



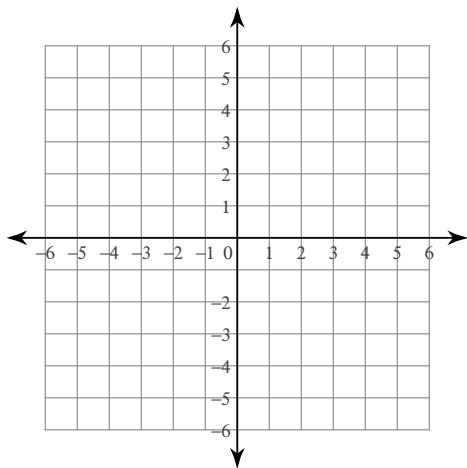
$$165) y > -\frac{7}{2}x - 2$$



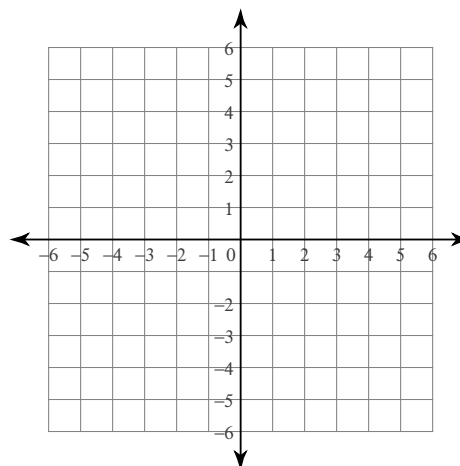
$$166) y > \frac{3}{2}x - 2$$



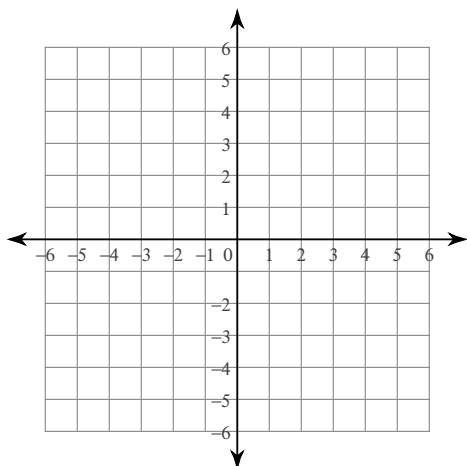
167) $y < x - 1$



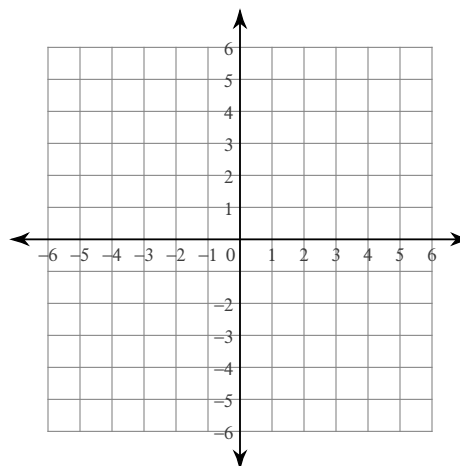
168) $y \leq \frac{5}{4}x + 4$



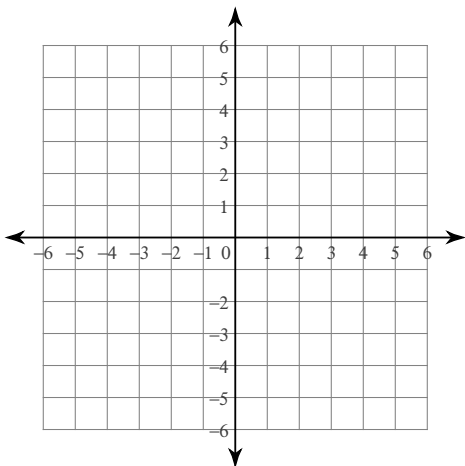
169) $y \leq \frac{3}{2}x + 4$



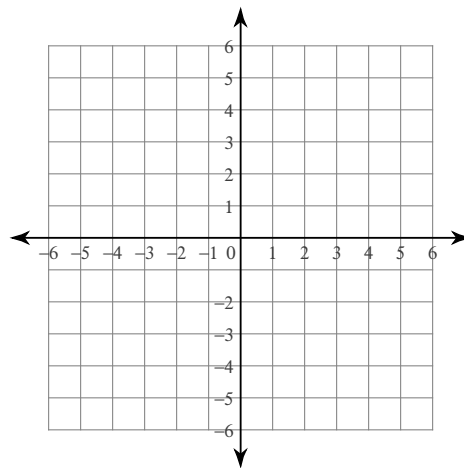
170) $y \geq -\frac{8}{5}x - 3$



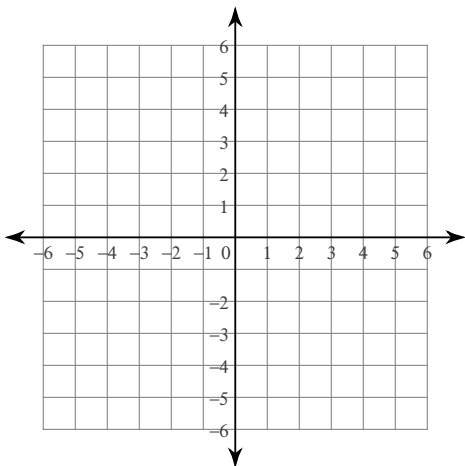
$$171) y \geq \frac{5}{4}x + 4$$



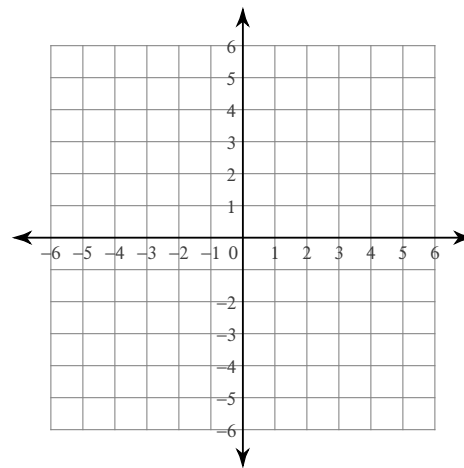
$$172) y > 2x - 1$$



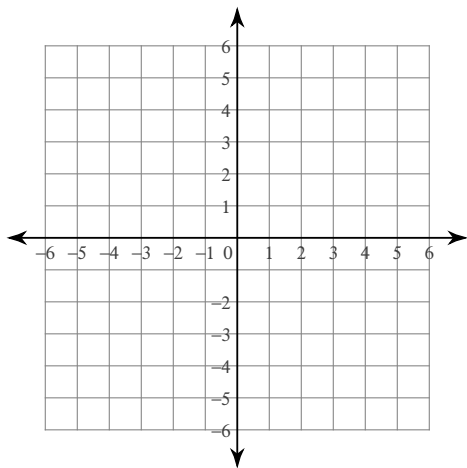
$$173) y \geq \frac{3}{2}x - 4$$



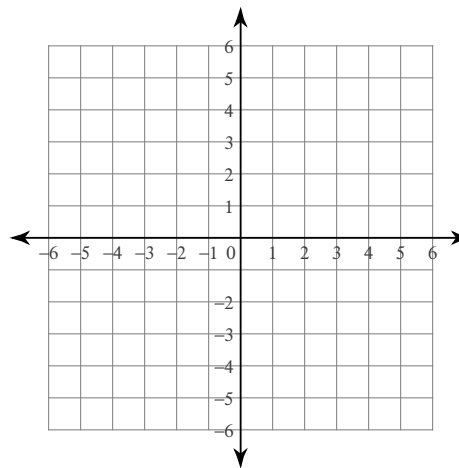
$$174) y \leq 3$$



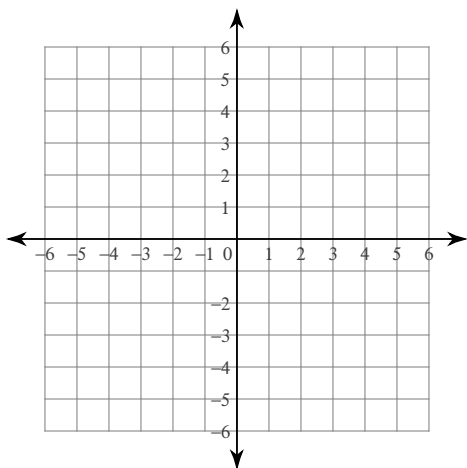
175) $y > 4x + 4$



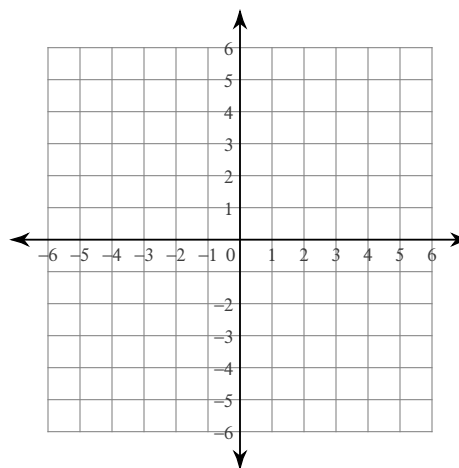
176) $y \geq 4x - 5$



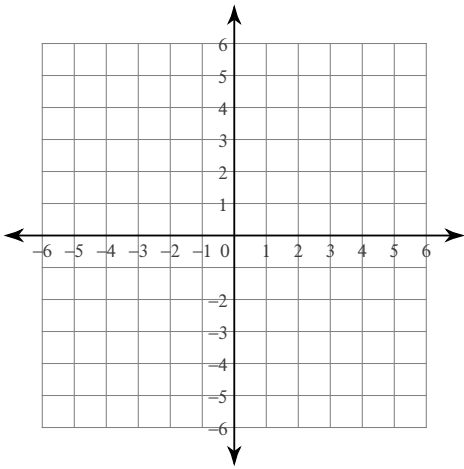
177) $y \geq -x + 1$



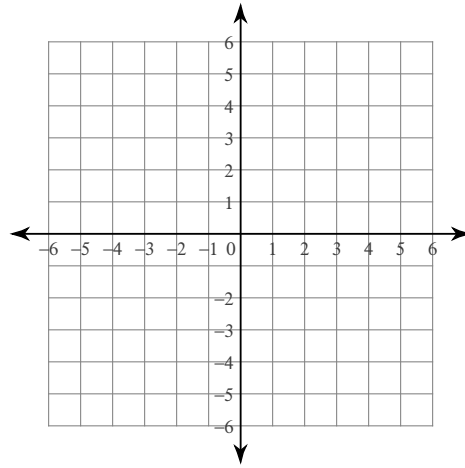
178) $y \geq -\frac{2}{5}x + 5$



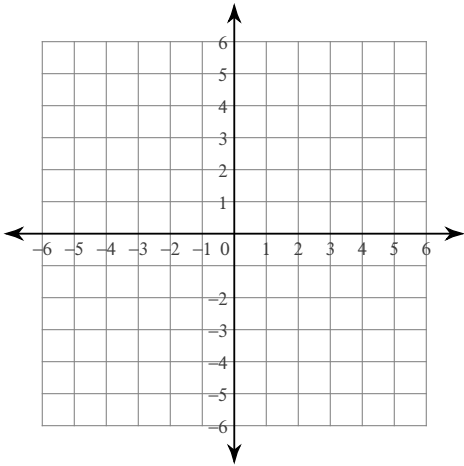
$$179) y \leq \frac{4}{5}x - 5$$



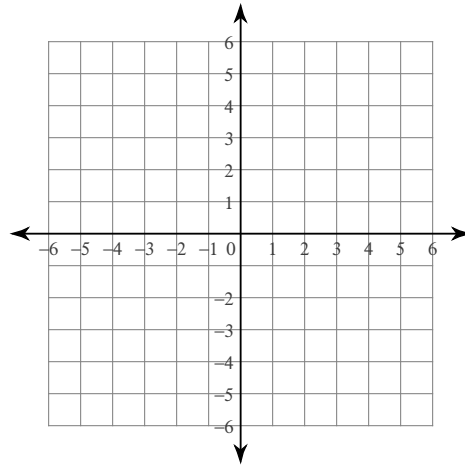
$$180) y \geq x + 3$$



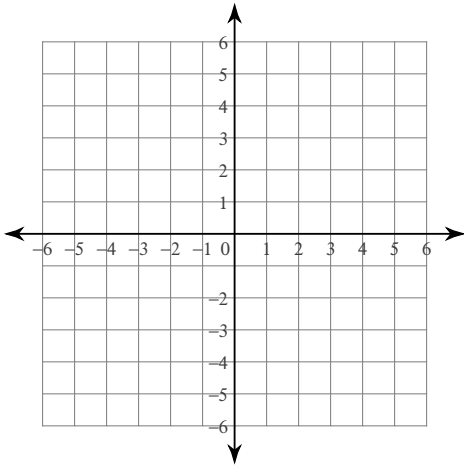
$$181) y > x - 2$$



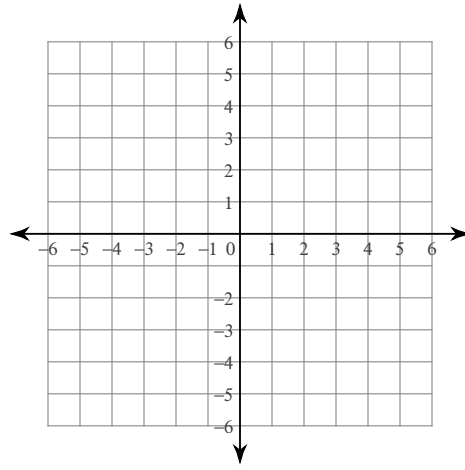
$$182) y < x - 4$$



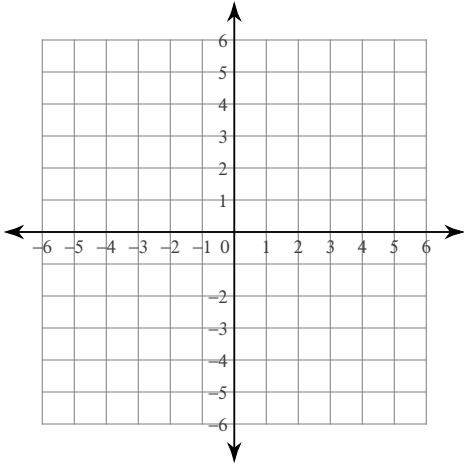
183) $y > 3x$



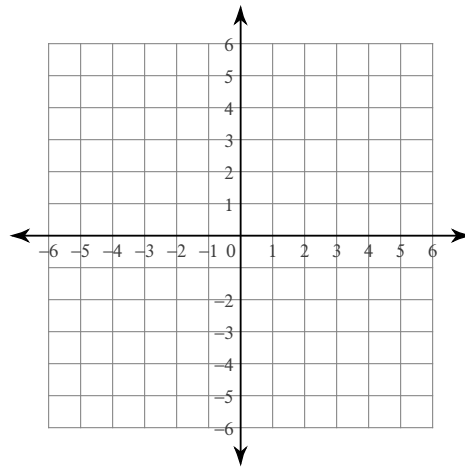
184) $y < -4x + 1$



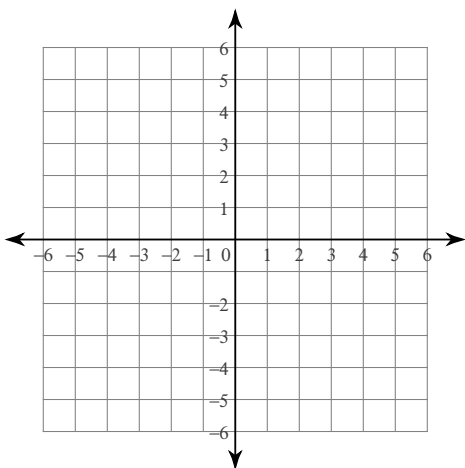
185) $y \leq x + 1$



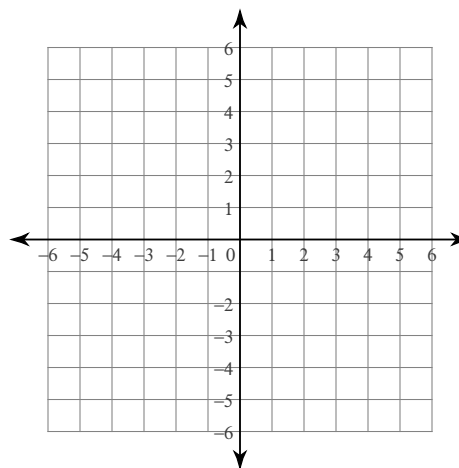
186) $y \leq \frac{5}{2}x + 5$



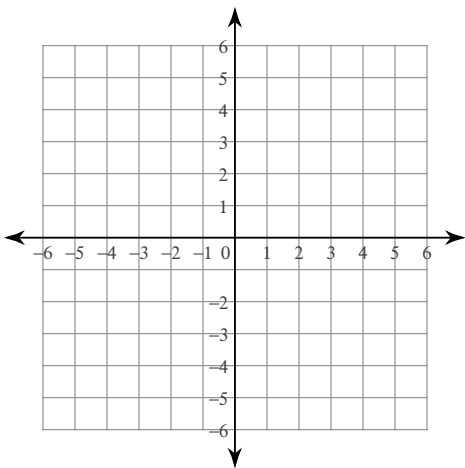
187) $y \geq \frac{5}{2}x - 4$



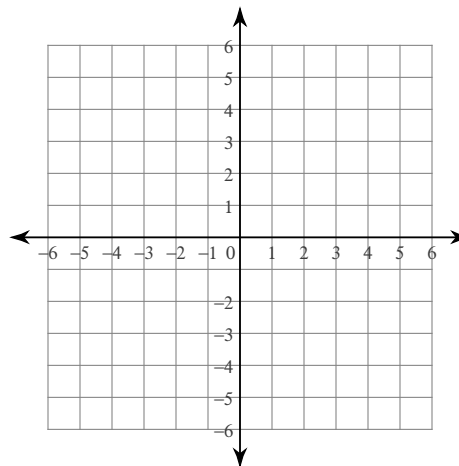
188) $y \leq -\frac{3}{2}x + 2$



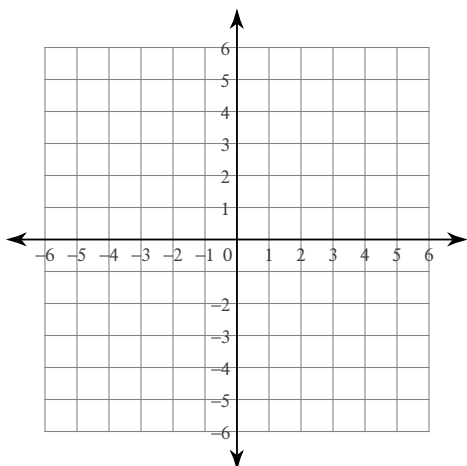
189) $y < -2x - 2$



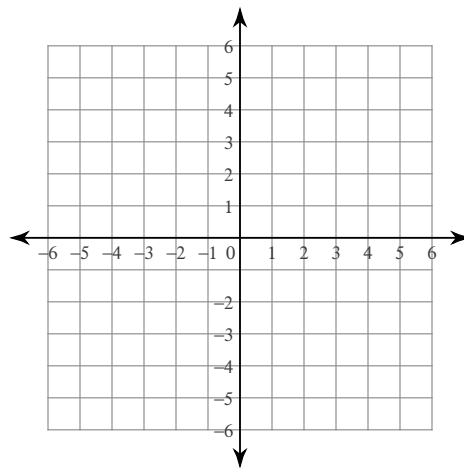
190) $y \geq -\frac{1}{2}x + 1$



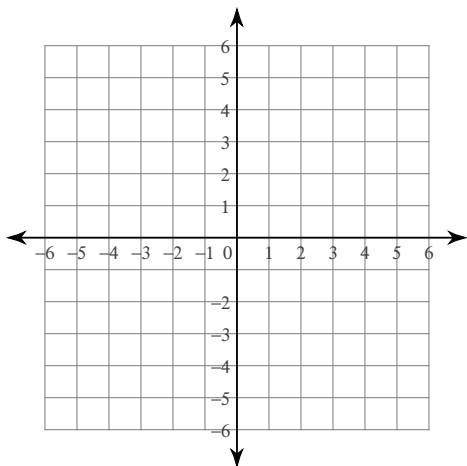
191) $y \leq -\frac{7}{4}x + 5$



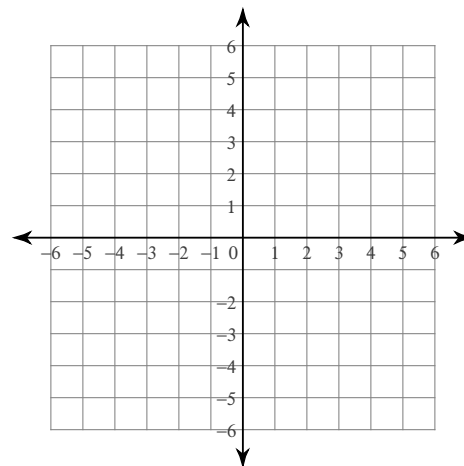
192) $y > -4x - 2$



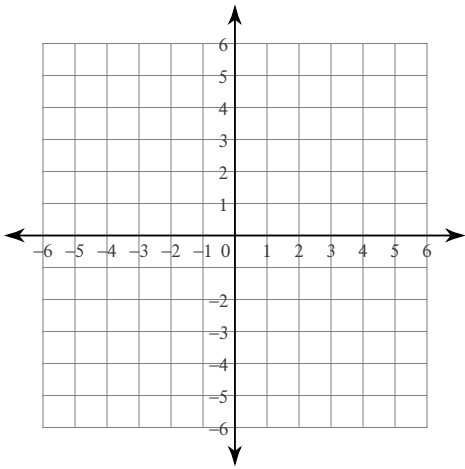
193) $y \leq -10x + 5$



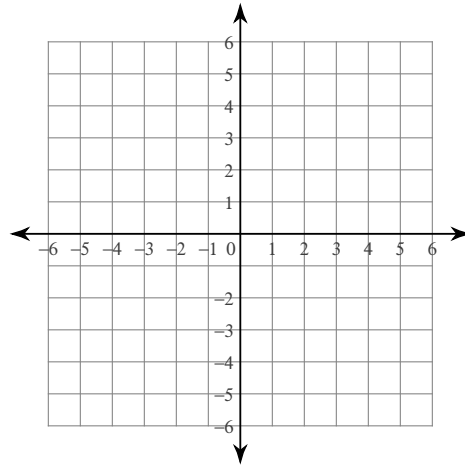
194) $y \geq 2$



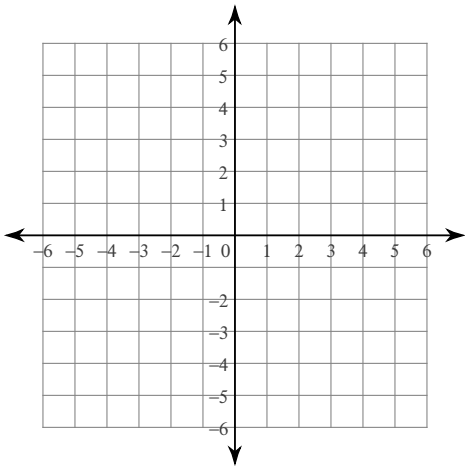
195) $y \leq -\frac{6}{5}x + 3$



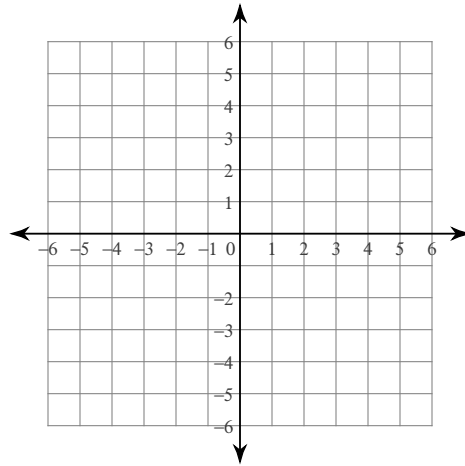
196) $x < -4$



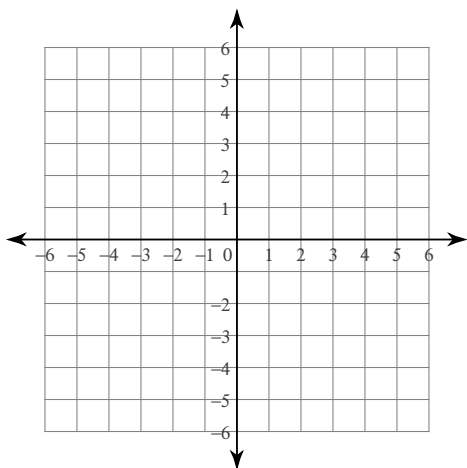
197) $y \geq -\frac{9}{4}x - 4$



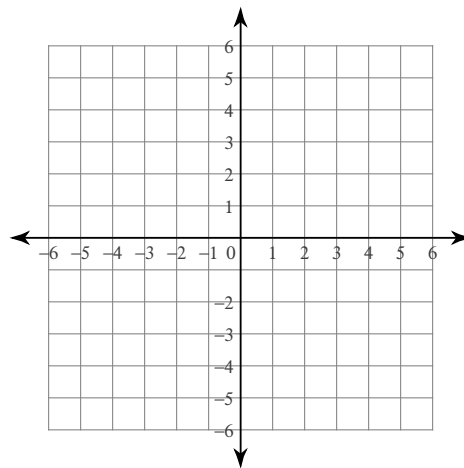
198) $y > -2x + 5$



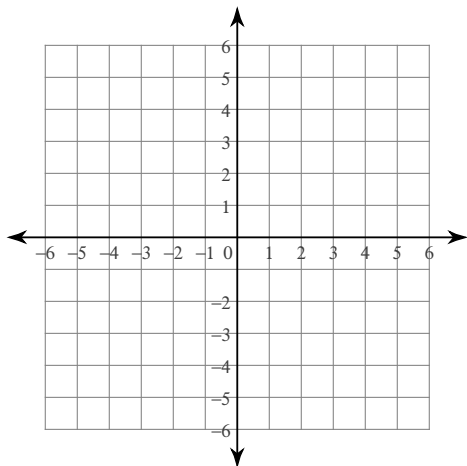
$$199) y \geq -\frac{1}{2}x + 2$$



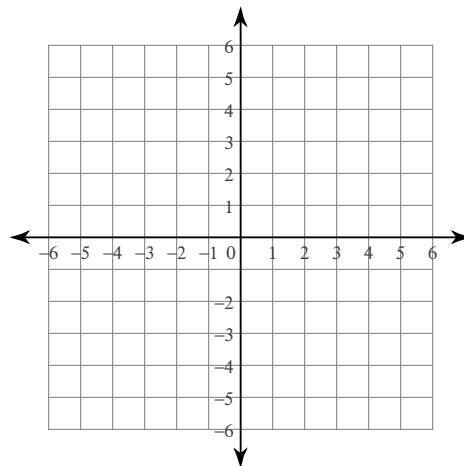
$$200) y > 4x + 5$$



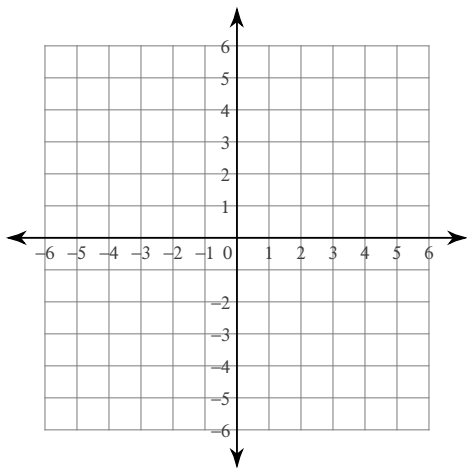
$$201) y > \frac{1}{2}x + 5$$



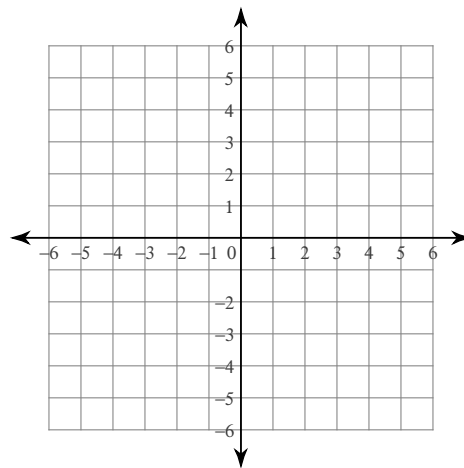
$$202) y \leq \frac{2}{3}x - 1$$



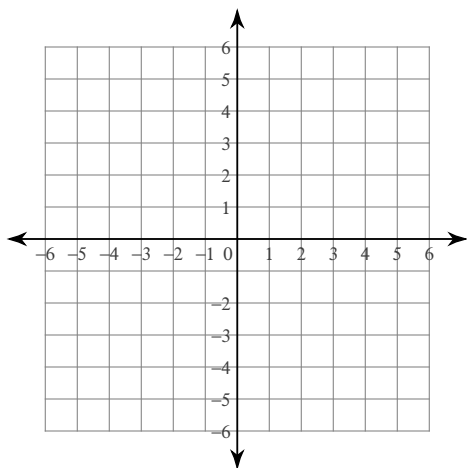
203) $y < -x + 3$



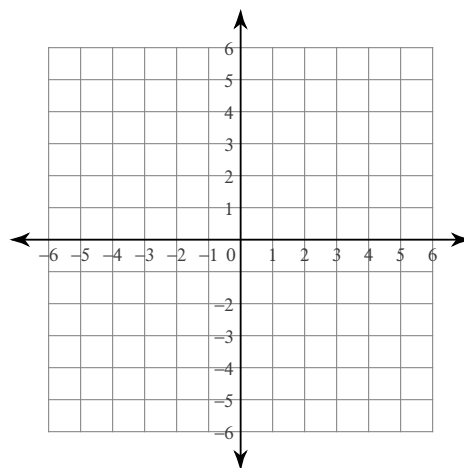
204) $y \geq x$



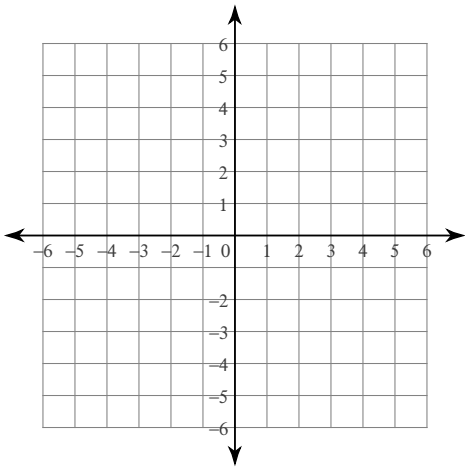
205) $y \geq x + 1$



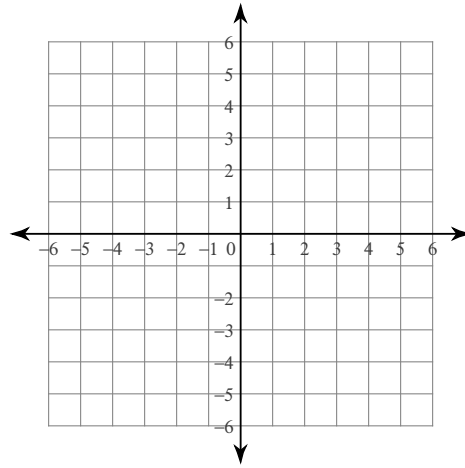
206) $y > \frac{4}{5}x - 4$



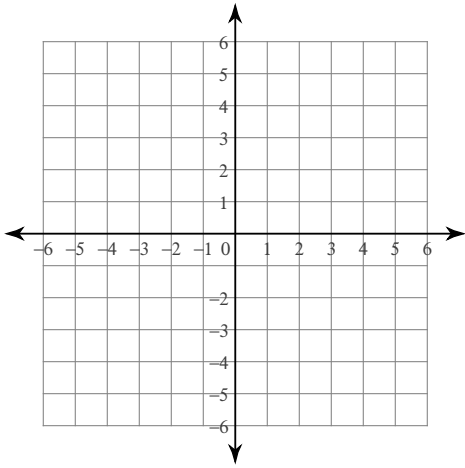
$$207) y > -\frac{2}{3}x + 1$$



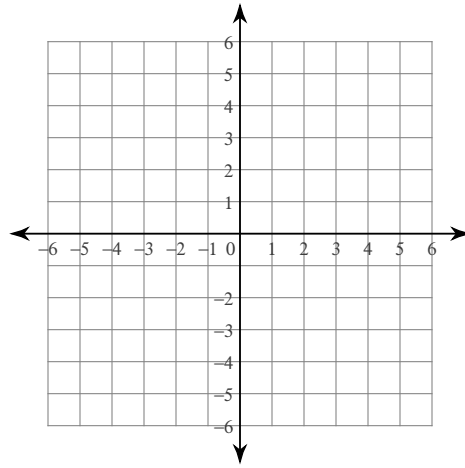
$$208) y \geq x - 2$$



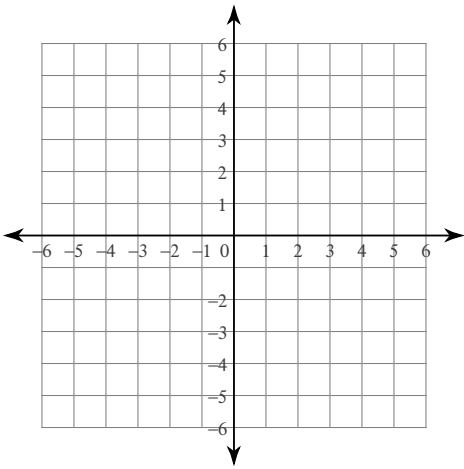
$$209) x < -5$$



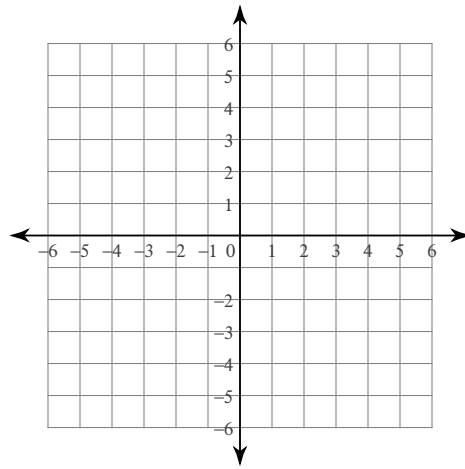
$$210) y > -x + 1$$



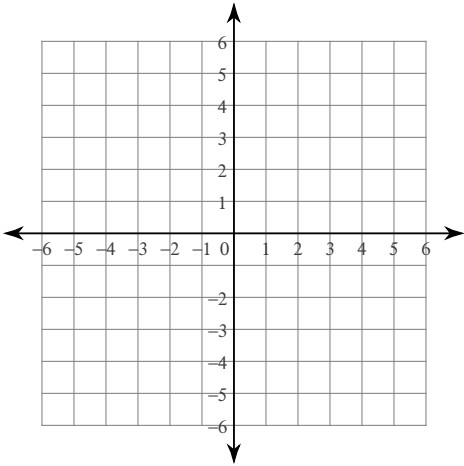
$$211) y < -\frac{1}{2}x + 2$$



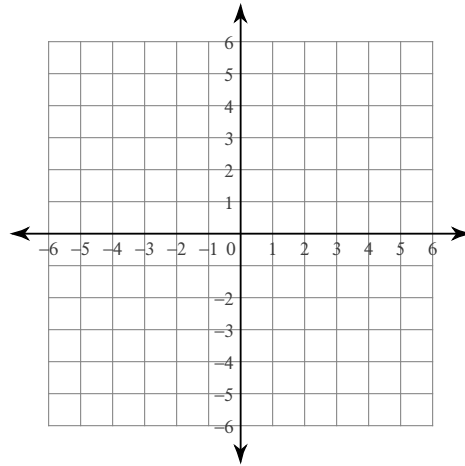
$$212) y < -\frac{7}{2}x - 3$$



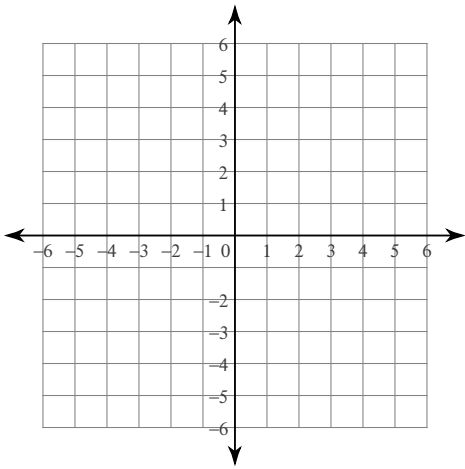
$$213) y \leq -\frac{1}{3}x - 2$$



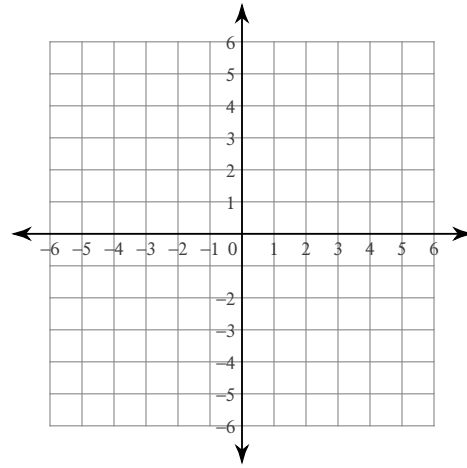
$$214) y > 2x + 5$$



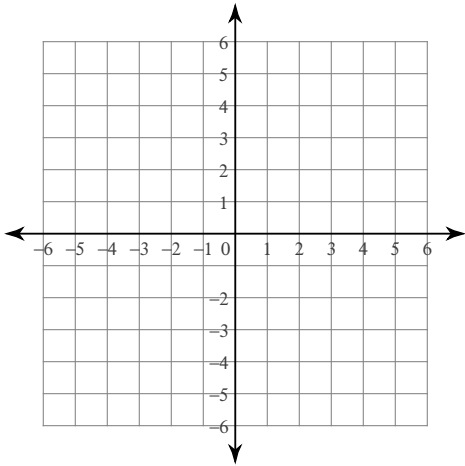
$$215) y \leq -\frac{7}{4}x + 3$$



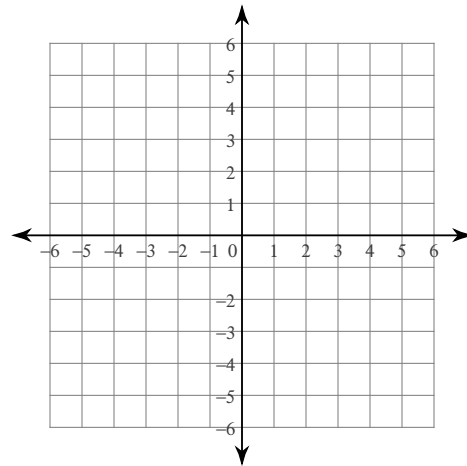
$$216) y \leq -2x - 5$$



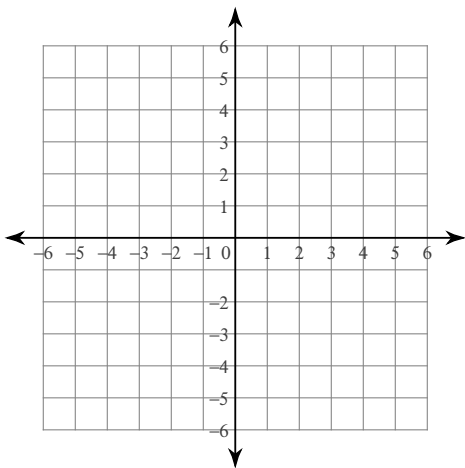
$$217) x \leq -3$$



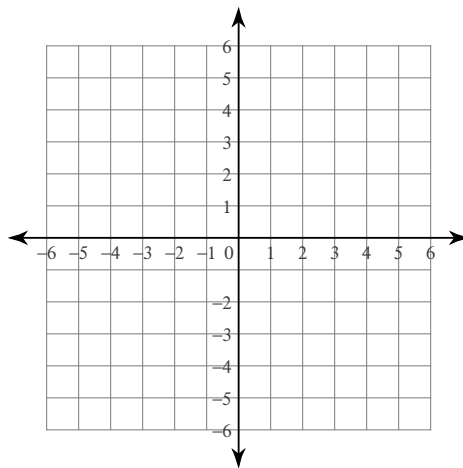
$$218) y < -\frac{9}{5}x - 5$$



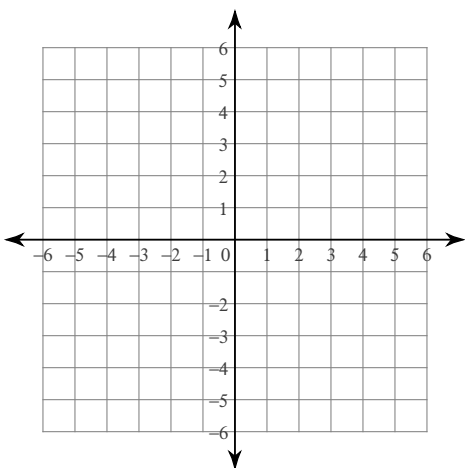
219) $y \leq 7x - 4$



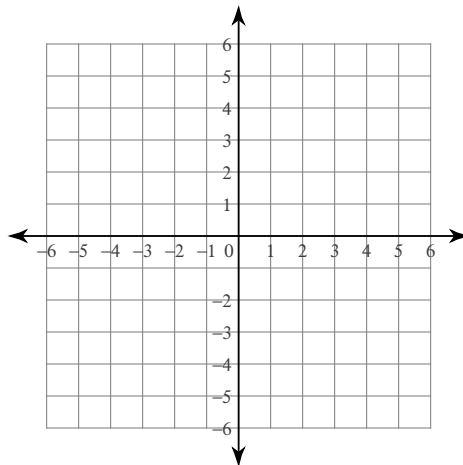
220) $y \geq 6x - 4$



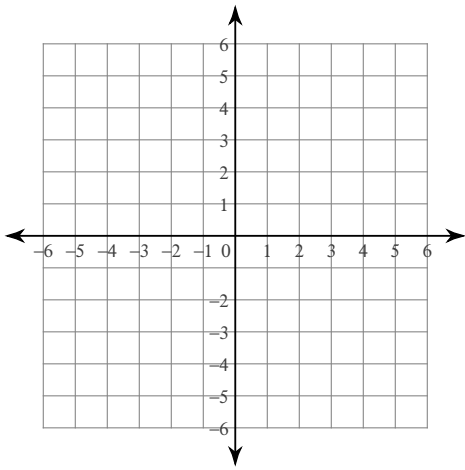
221) $y \leq -\frac{3}{5}x - 2$



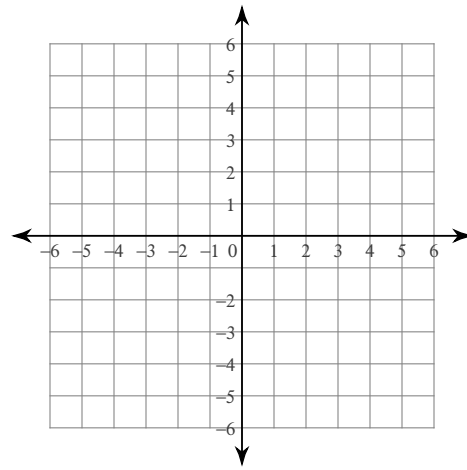
222) $y > x + 1$



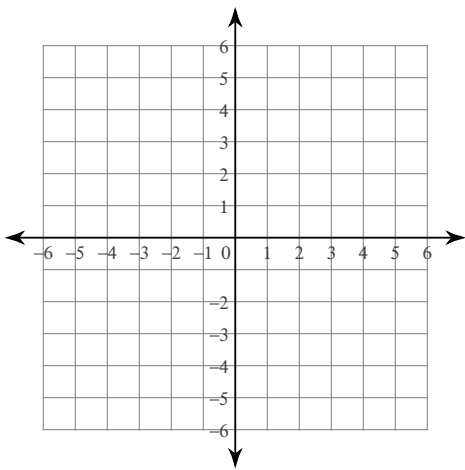
223) $y \leq x - 1$



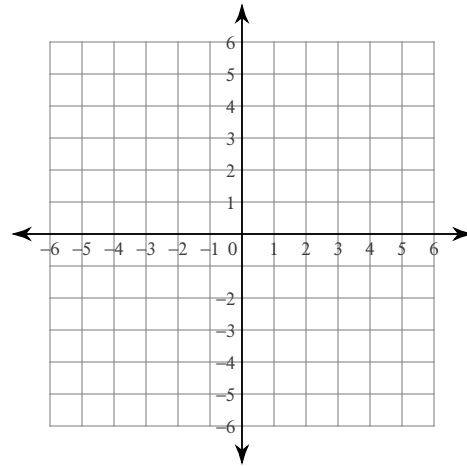
224) $y \geq -6x - 2$



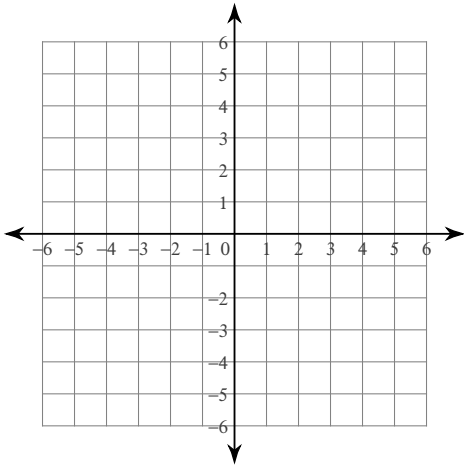
225) $y \geq \frac{3}{4}x - 2$



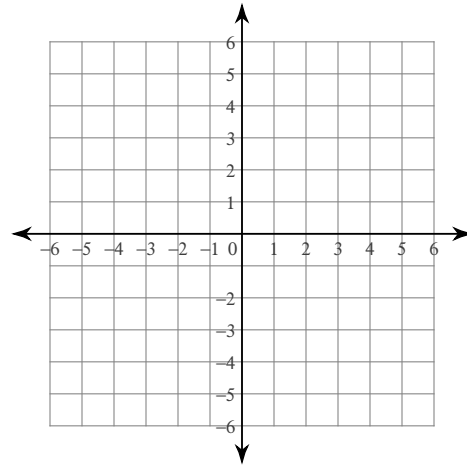
226) $y > -x - 4$



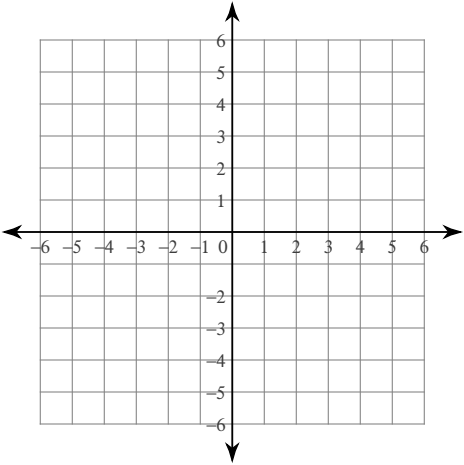
227) $y > 0$



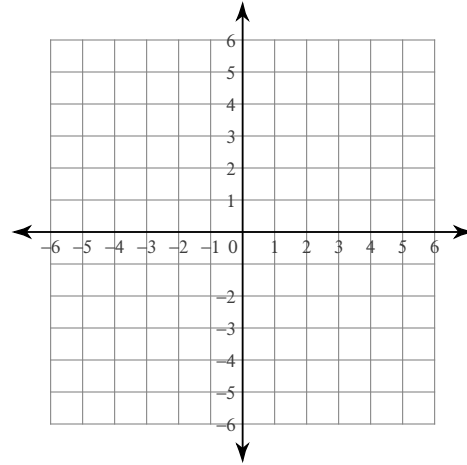
228) $x + 3y < -12$



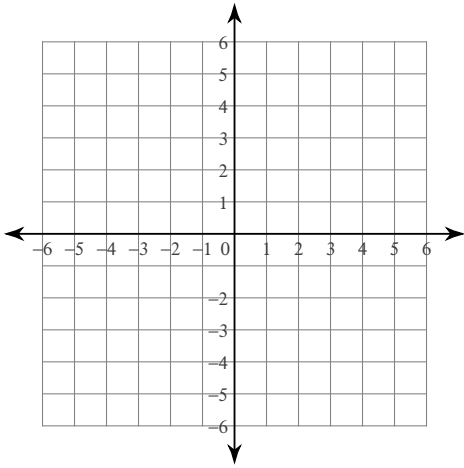
229) $x + y > 0$



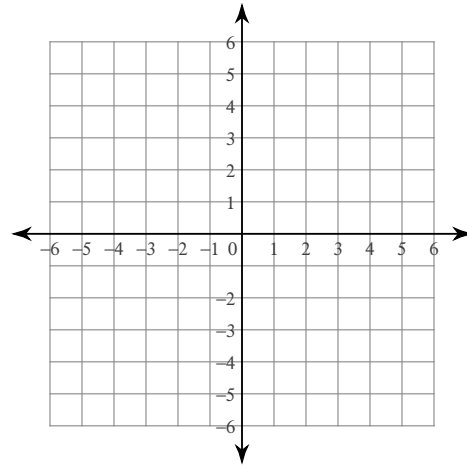
230) $x - y < 5$



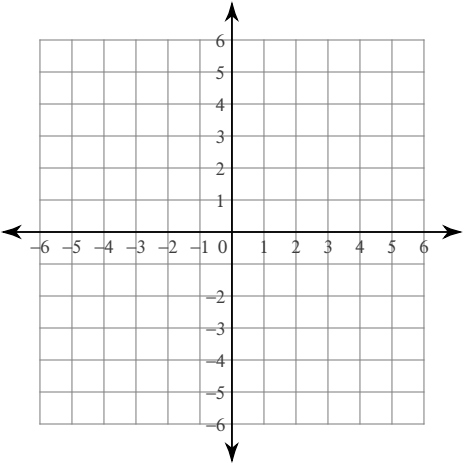
231) $y > 2$



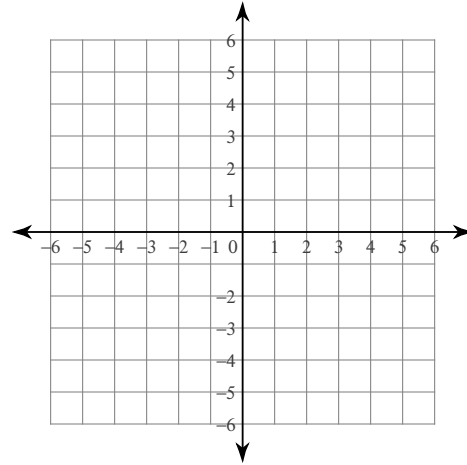
232) $x + y > -4$



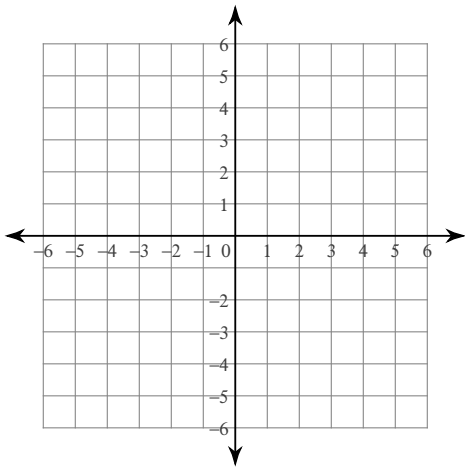
233) $3x - 4y > -12$



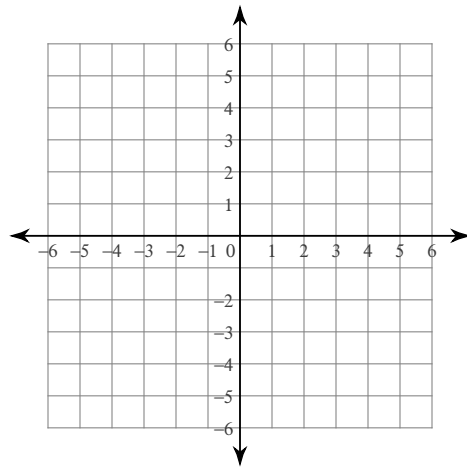
234) $3x + y < 5$



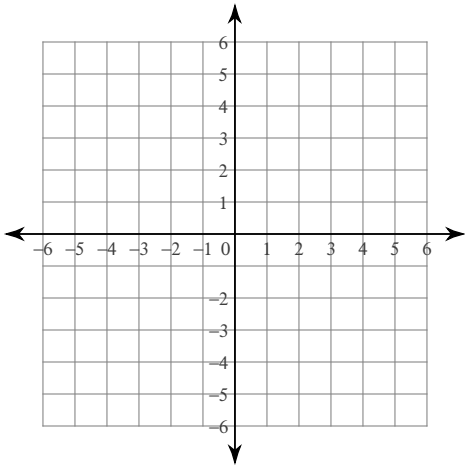
235) $6x + 5y > 5$



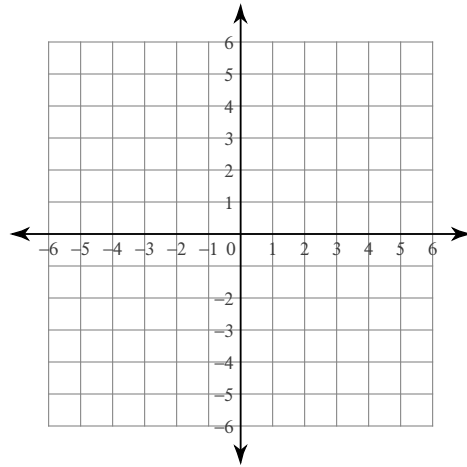
236) $4x + 5y > -5$



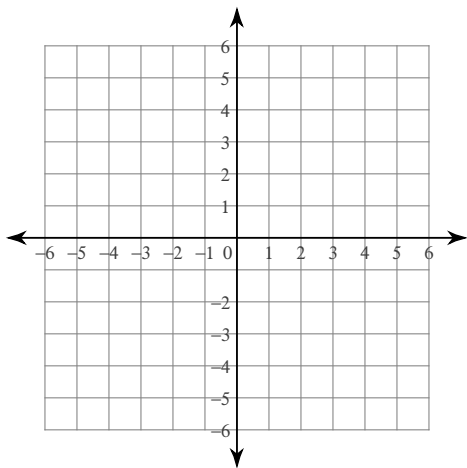
237) $4x - y \geq -3$



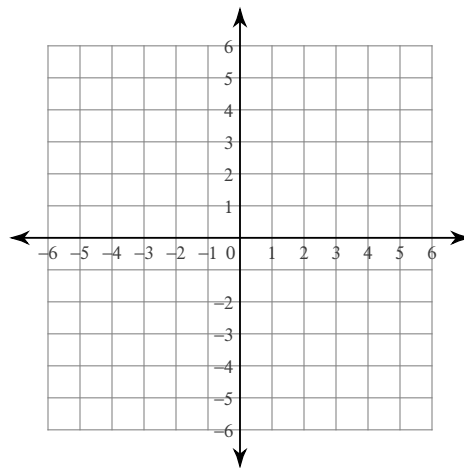
238) $5x - y \geq 0$



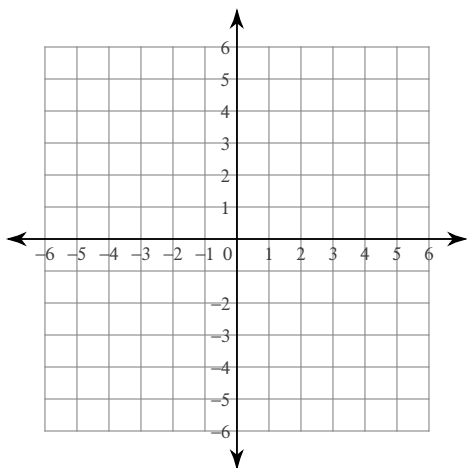
239) $3x - y \geq -3$



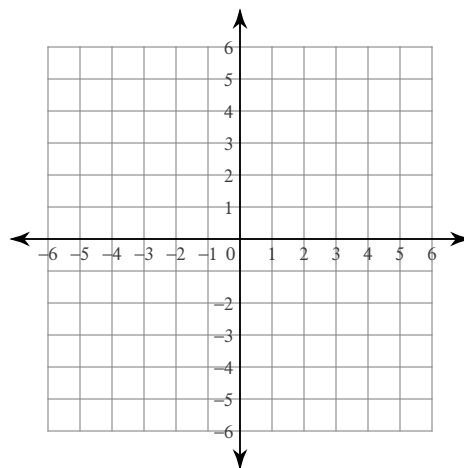
240) $3x + 2y < -2$



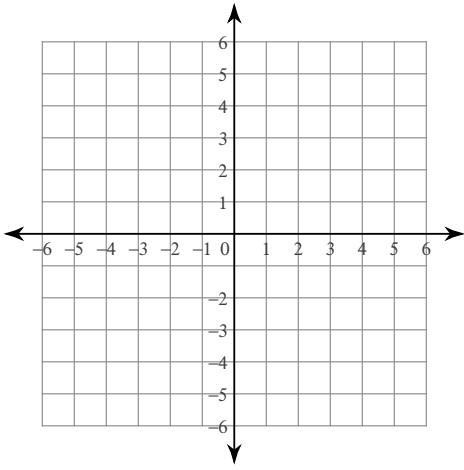
241) $2x + y \leq -2$



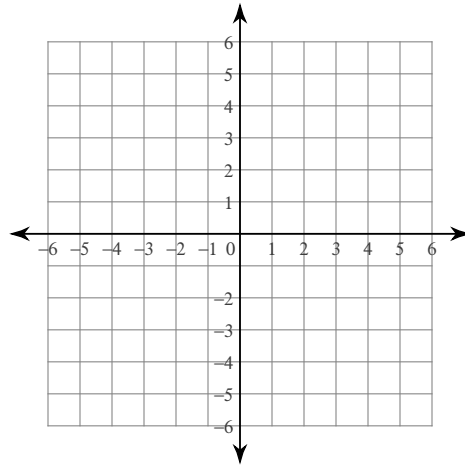
242) $3x - 4y < -8$



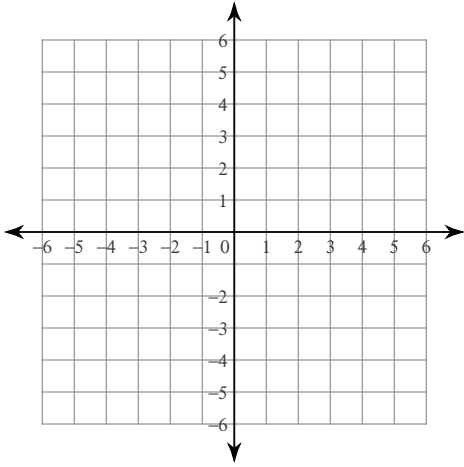
243) $x - 2y > 10$



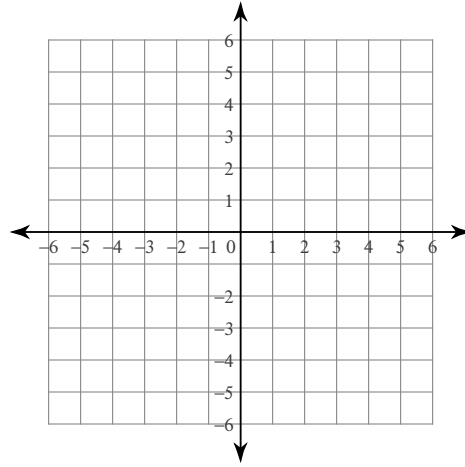
244) $8x - y \leq -3$



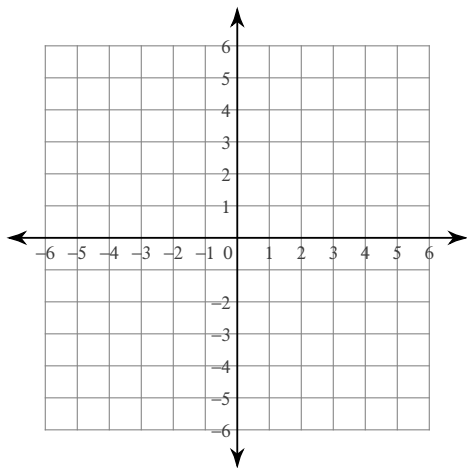
245) $9x + 2y \geq 8$



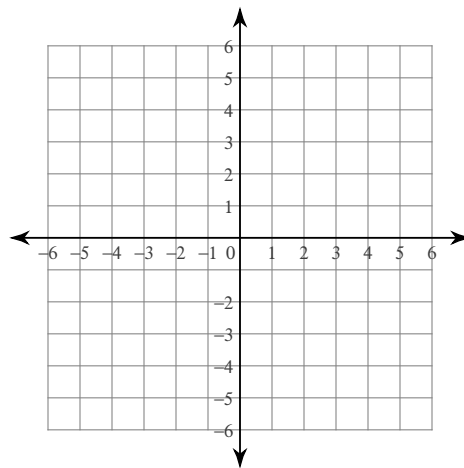
246) $2x - y \leq 3$



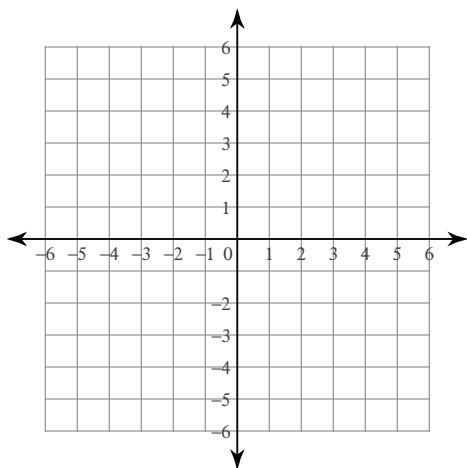
247) $x + 4y \leq 4$



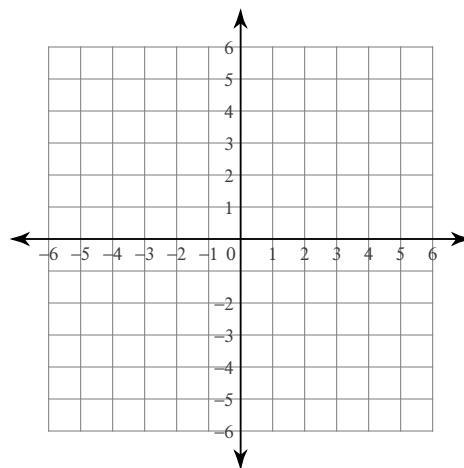
248) $2x + y \geq -2$



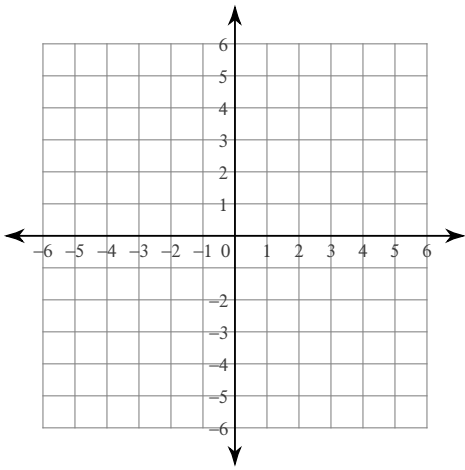
249) $3x - 5y > 0$



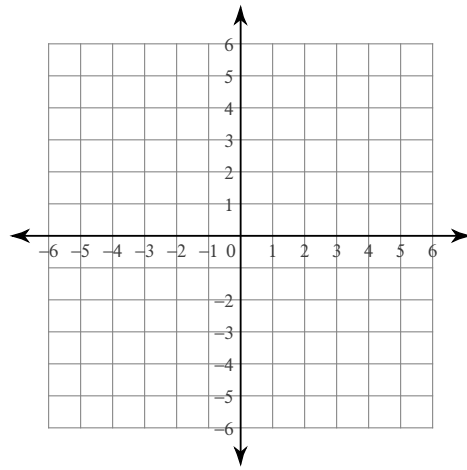
250) $3x - 5y > 25$



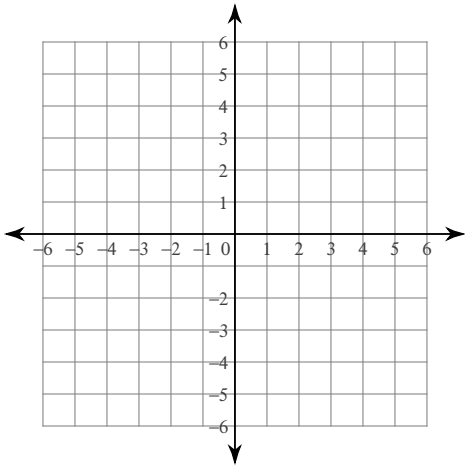
251) $x + y > -2$



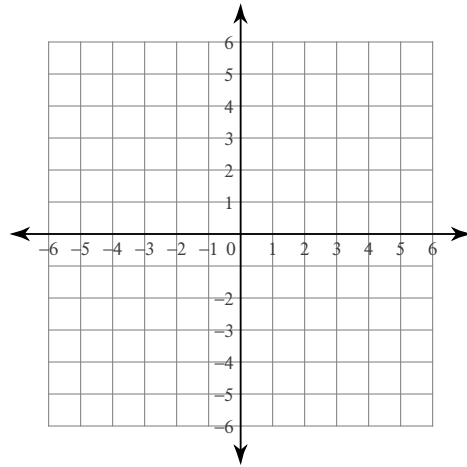
252) $6x - 5y \geq 5$



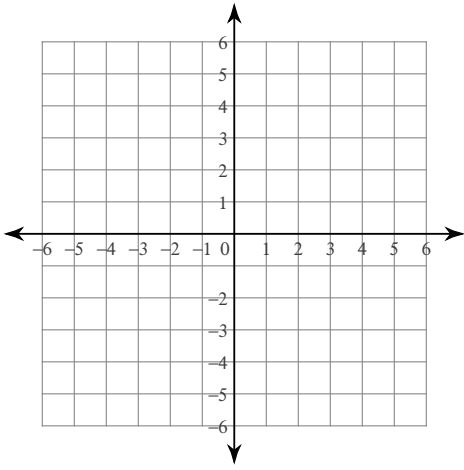
253) $7x - y < -4$



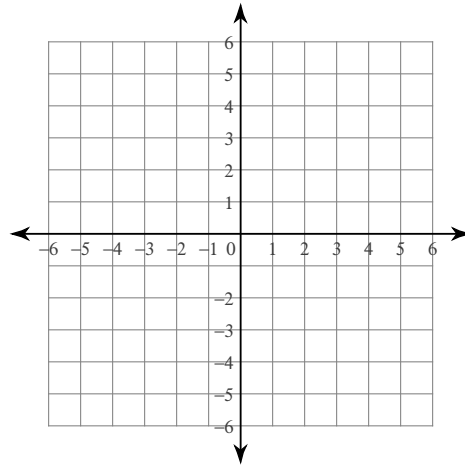
254) $4x - y > 3$



255) $5x - 4y \geq 0$



256) $4x - 3y \leq 3$

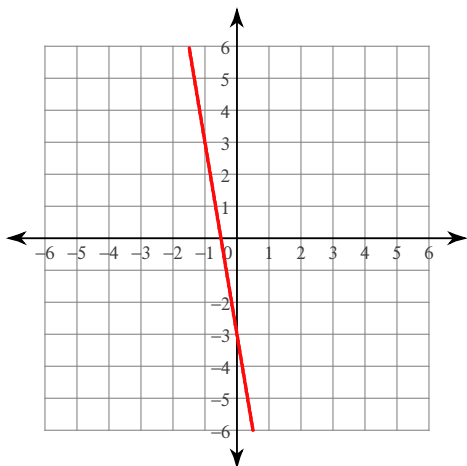


ALL ABOUT LINEAR EQUATIONS

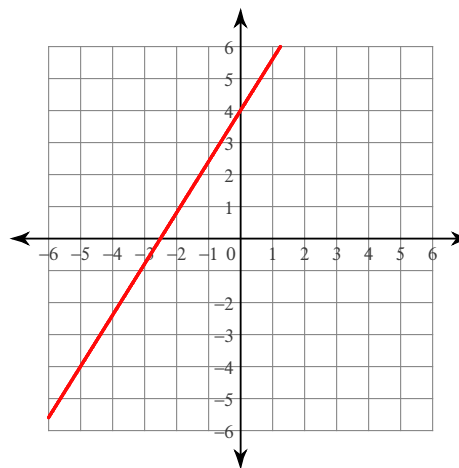
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Sketch the graph of each line.

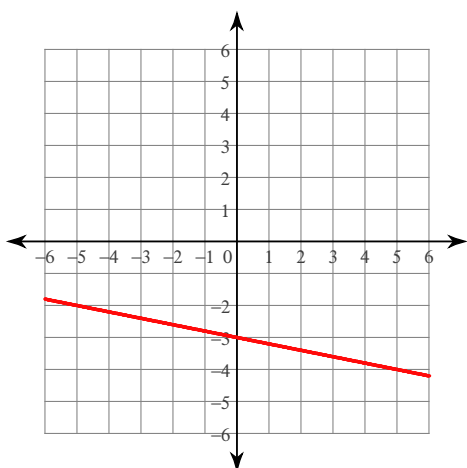
1) $y = -6x - 3$



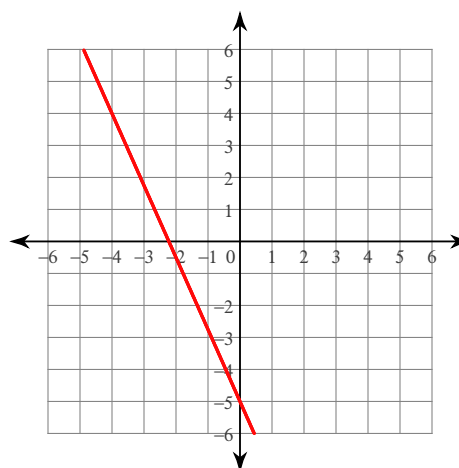
2) $y = \frac{8}{5}x + 4$



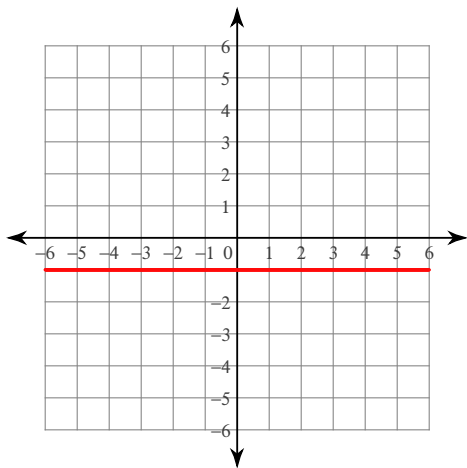
3) $y = -\frac{1}{5}x - 3$



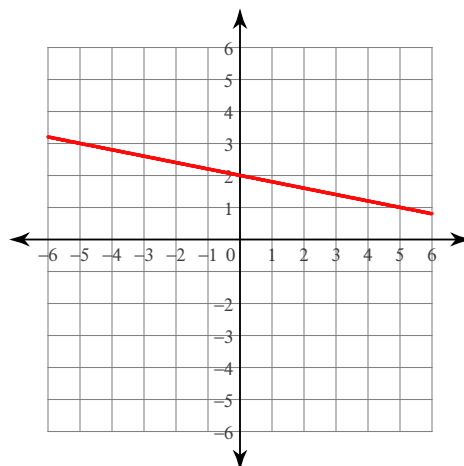
4) $y = -\frac{9}{4}x - 5$



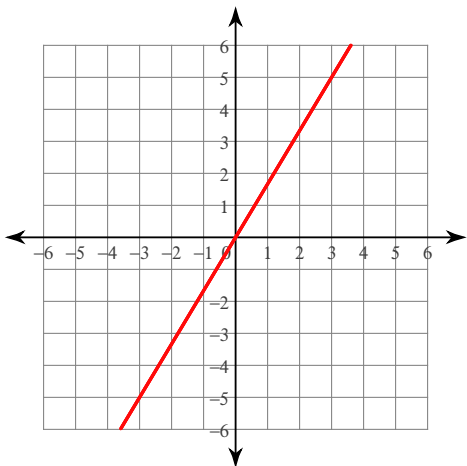
5) $y = -1$



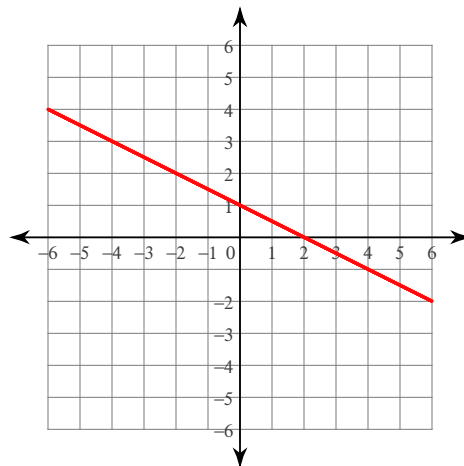
6) $y = -\frac{1}{5}x + 2$



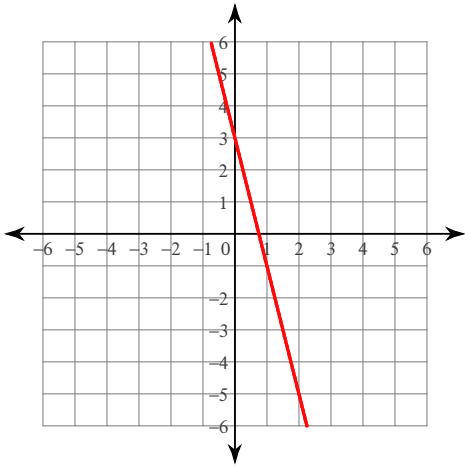
7) $y = \frac{5}{3}x$



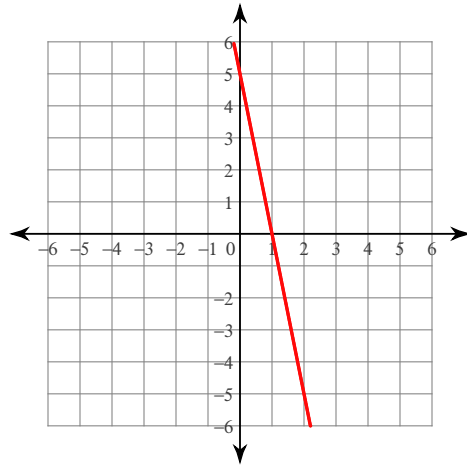
8) $y = -\frac{1}{2}x + 1$



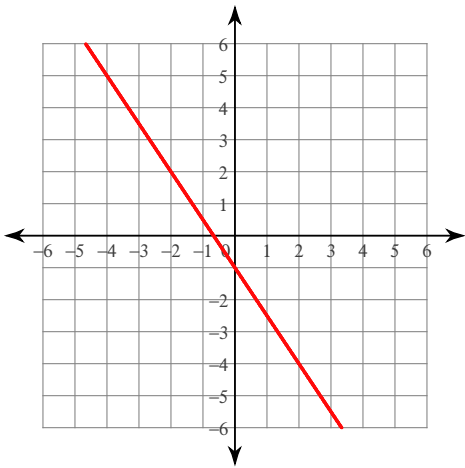
9) $y = -4x + 3$



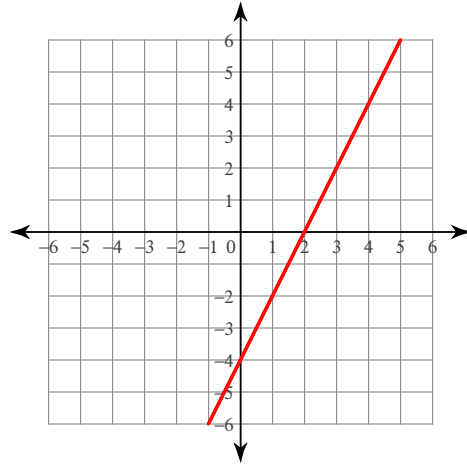
10) $y = -5x + 5$



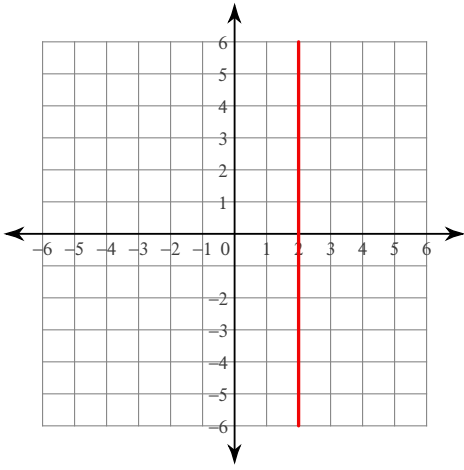
11) $y = -\frac{3}{2}x - 1$



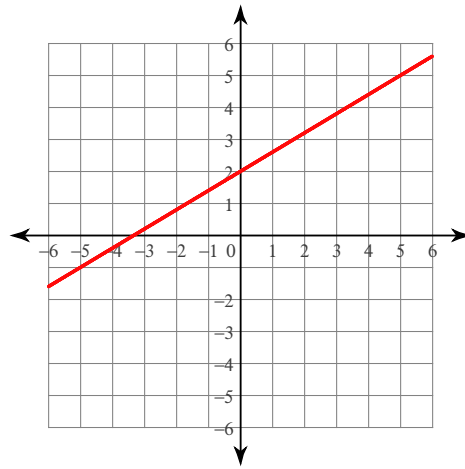
12) $y = 2x - 4$



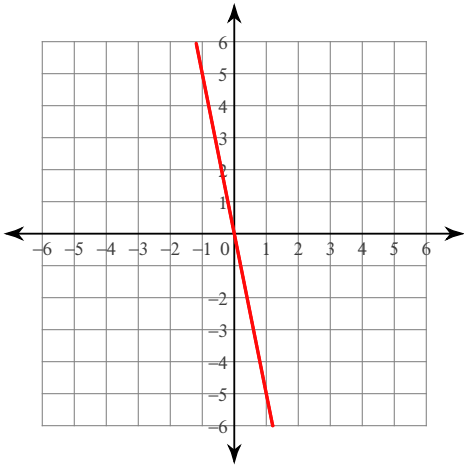
13) $x = 2$



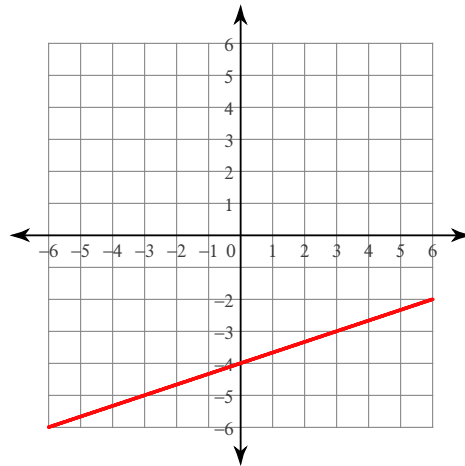
14) $y = \frac{3}{5}x + 2$



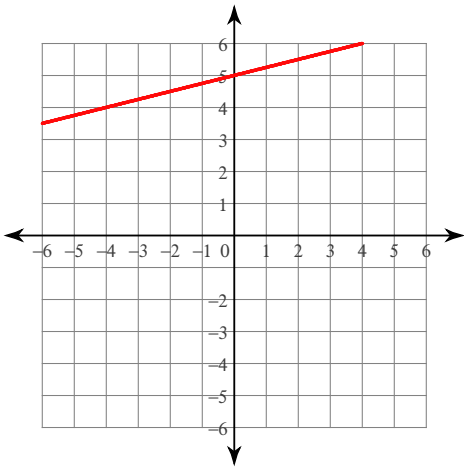
15) $y = -5x$



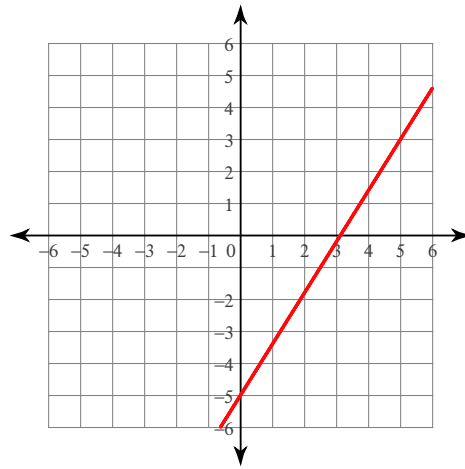
16) $y = \frac{1}{3}x - 4$



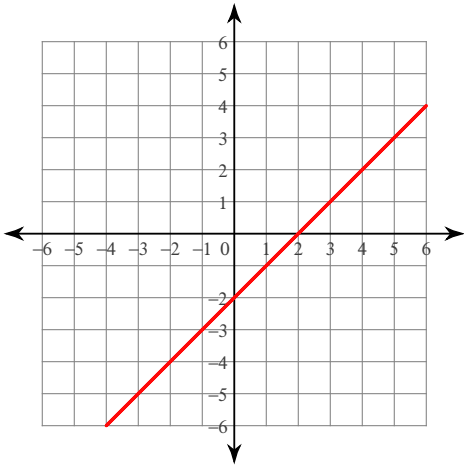
$$17) y = \frac{1}{4}x + 5$$



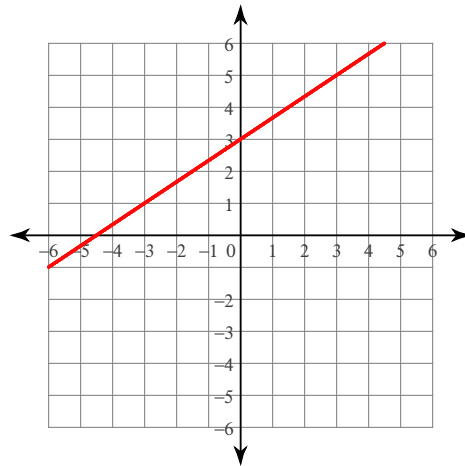
$$18) y = \frac{8}{5}x - 5$$



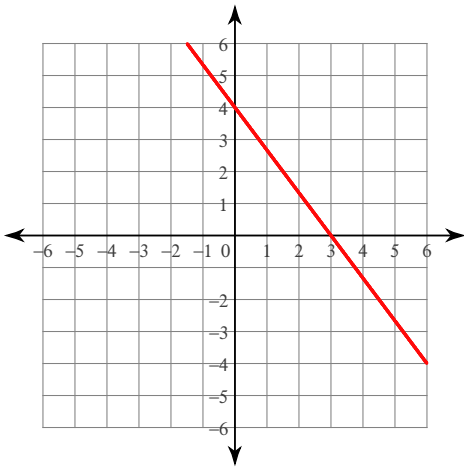
$$19) y = x - 2$$



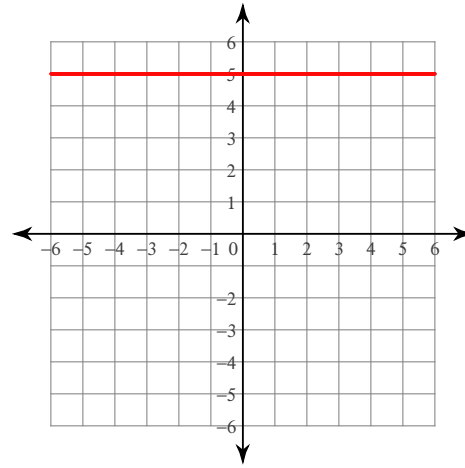
$$20) y = \frac{2}{3}x + 3$$



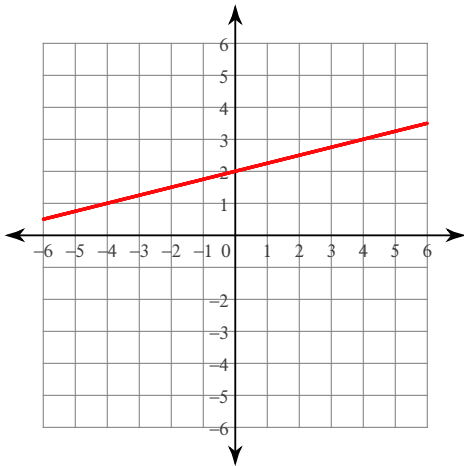
21) $y = -\frac{4}{3}x + 4$



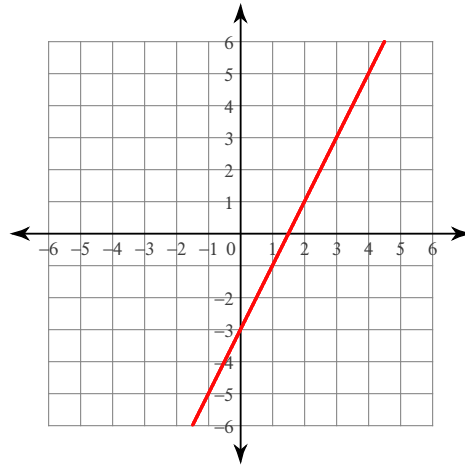
22) $y = 5$



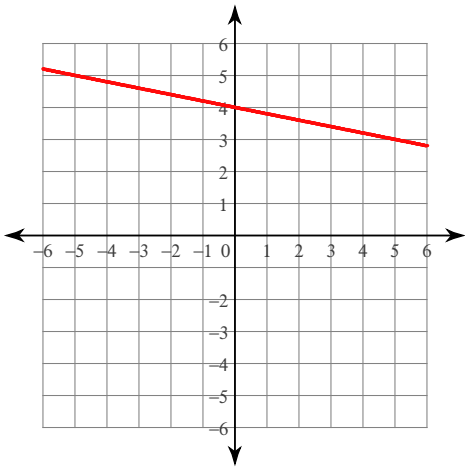
23) $y = \frac{1}{4}x + 2$



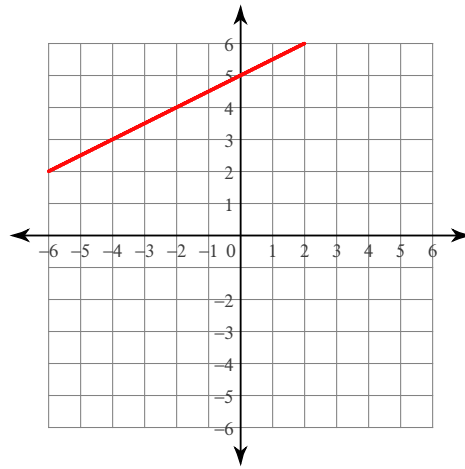
24) $y = 2x - 3$



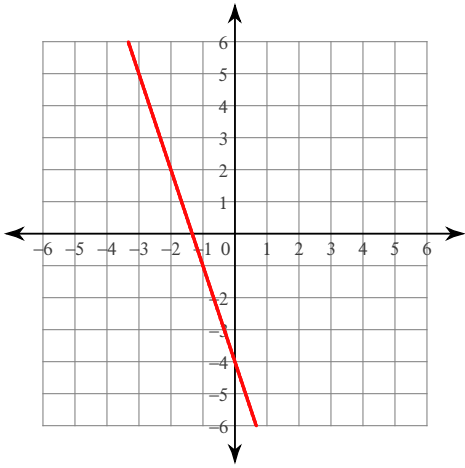
$$25) y = -\frac{1}{5}x + 4$$



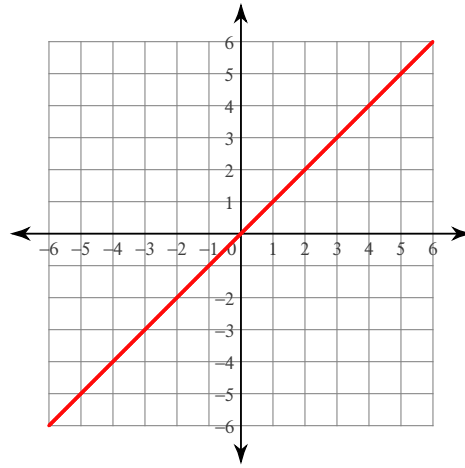
$$26) y = \frac{1}{2}x + 5$$



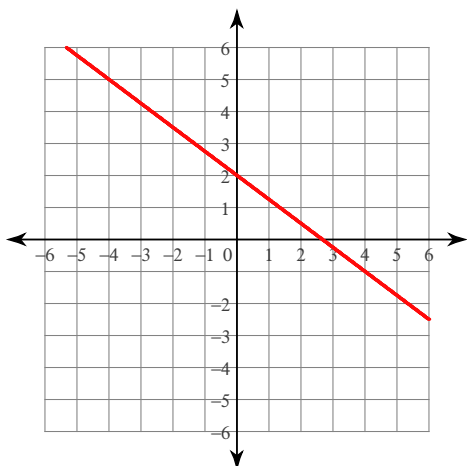
$$27) y = -3x - 4$$



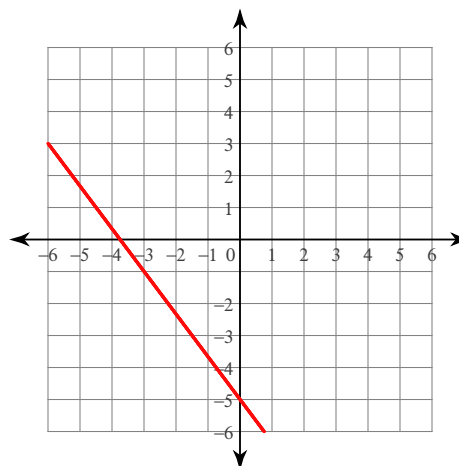
$$28) y = x$$



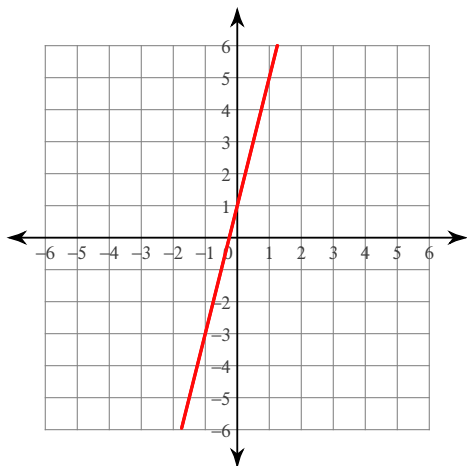
29) $y = -\frac{3}{4}x + 2$



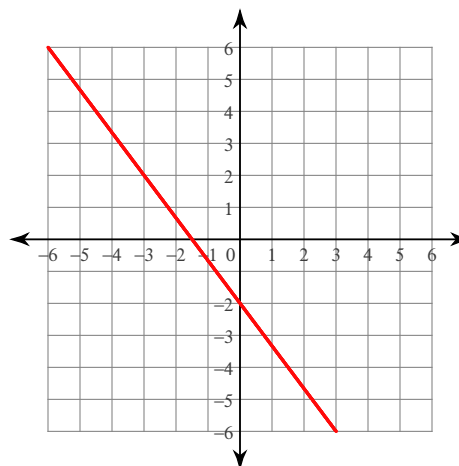
30) $y = -\frac{4}{3}x - 5$



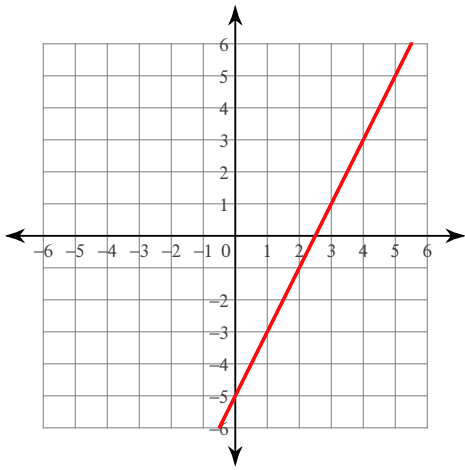
31) $y = 4x + 1$



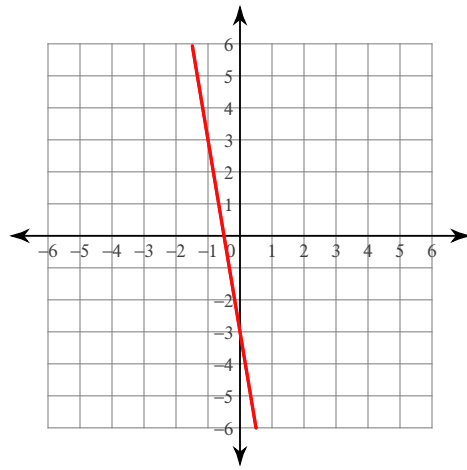
32) $y = -\frac{4}{3}x - 2$



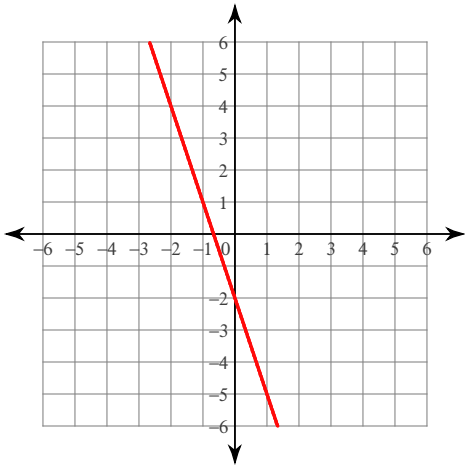
33) $y = 2x - 5$



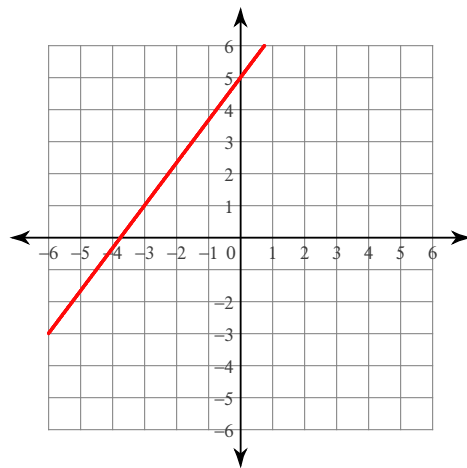
34) $y = -6x - 3$



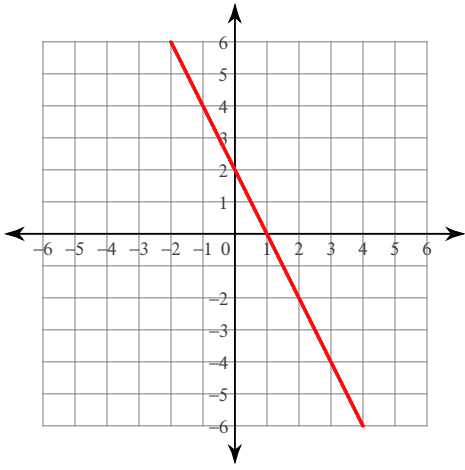
35) $y = -3x - 2$



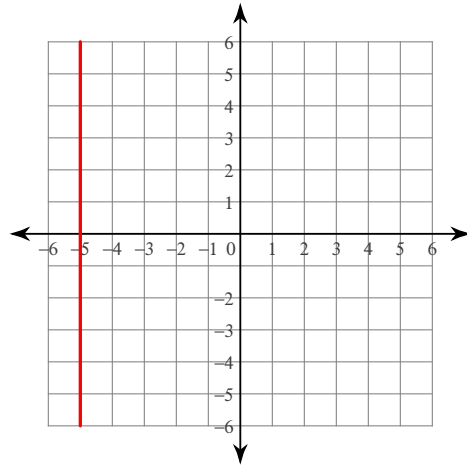
36) $y = \frac{4}{3}x + 5$



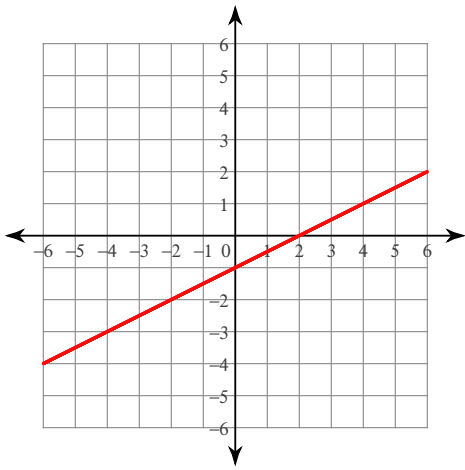
37) $y = -2x + 2$



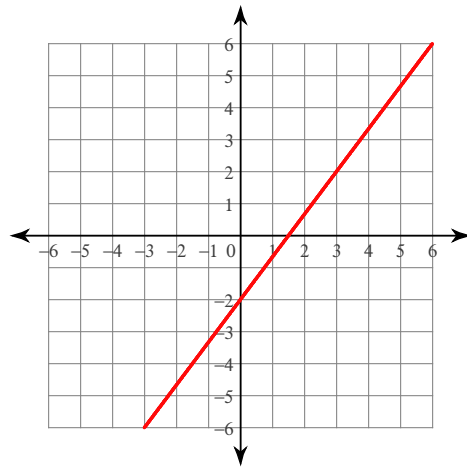
38) $x = -5$



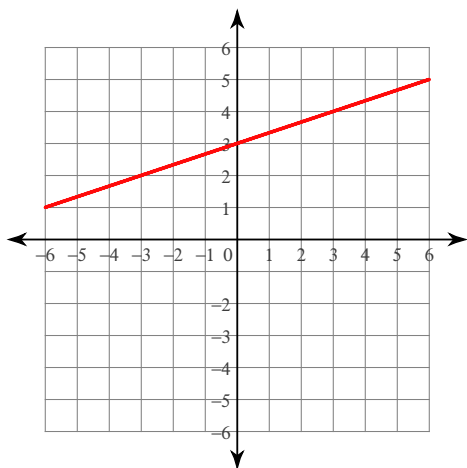
39) $y = \frac{1}{2}x - 1$



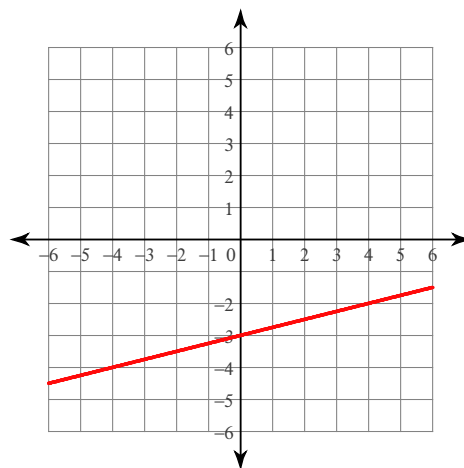
40) $y = \frac{4}{3}x - 2$



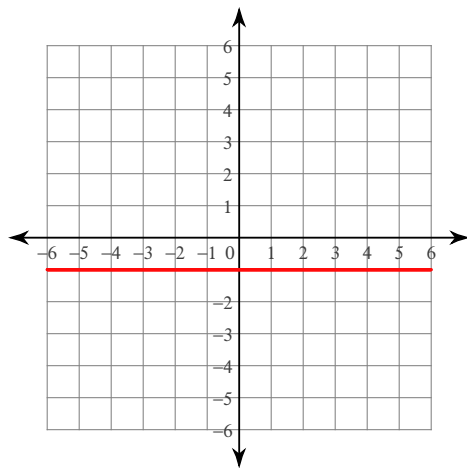
$$41) y = \frac{1}{3}x + 3$$



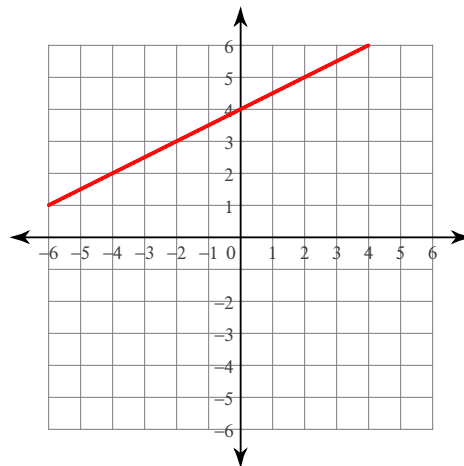
$$42) y = \frac{1}{4}x - 3$$



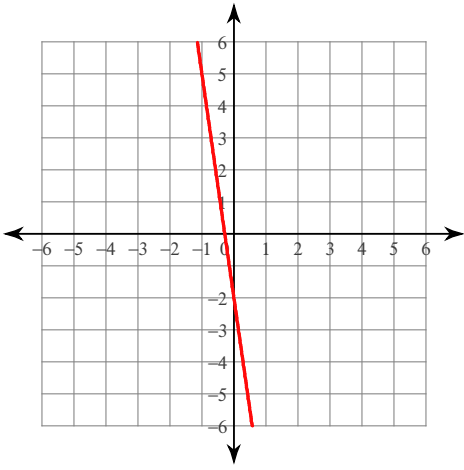
$$43) y = -1$$



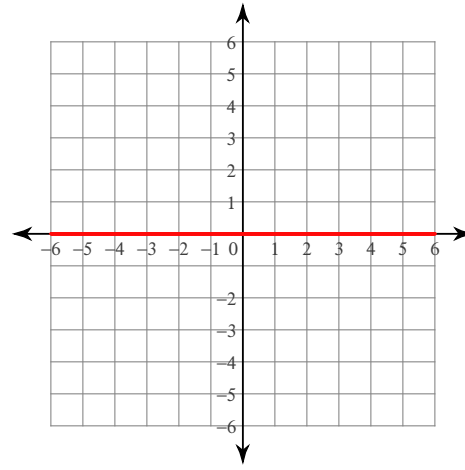
$$44) y = \frac{1}{2}x + 4$$



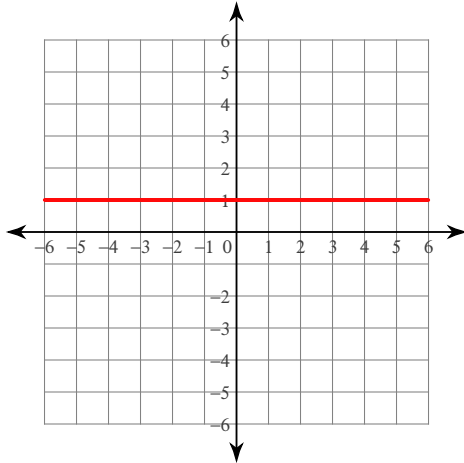
45) $y = -7x - 2$



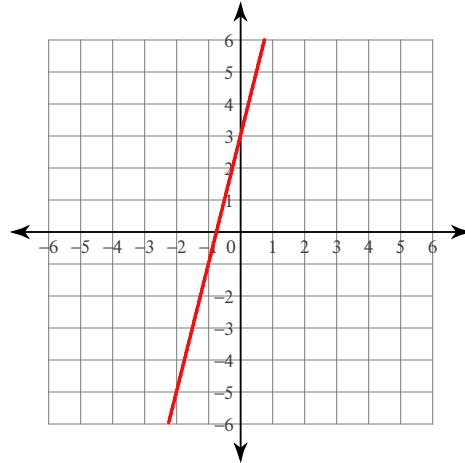
46) $y = 0$



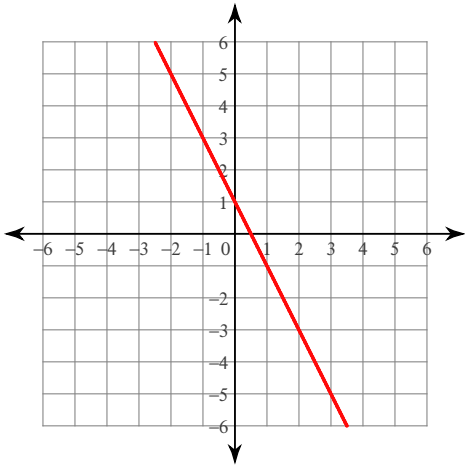
47) $y = 1$



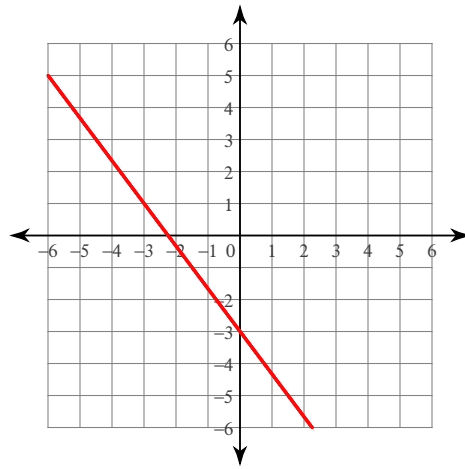
48) $y = 4x + 3$



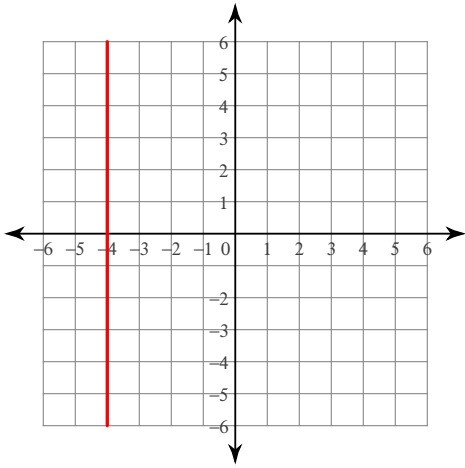
49) $y = -2x + 1$



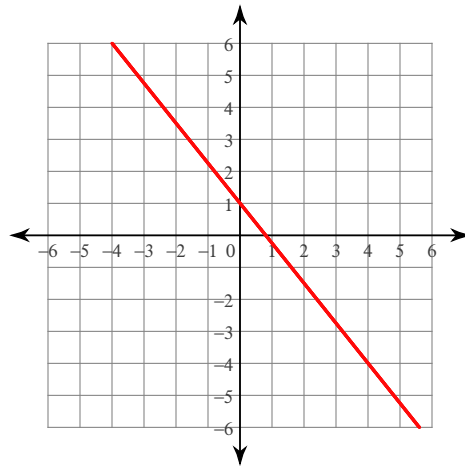
50) $y = -\frac{4}{3}x - 3$



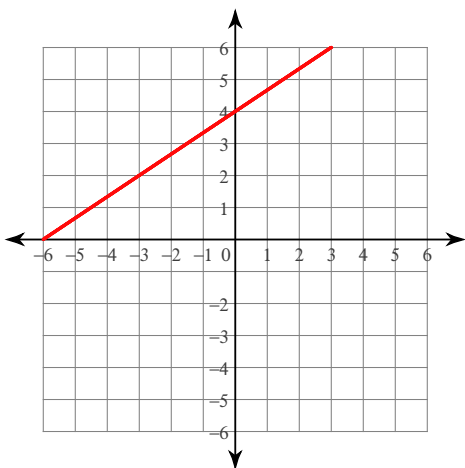
51) $x = -4$



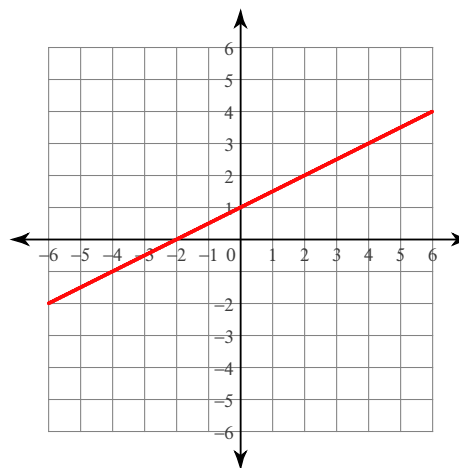
52) $y = -\frac{5}{4}x + 1$



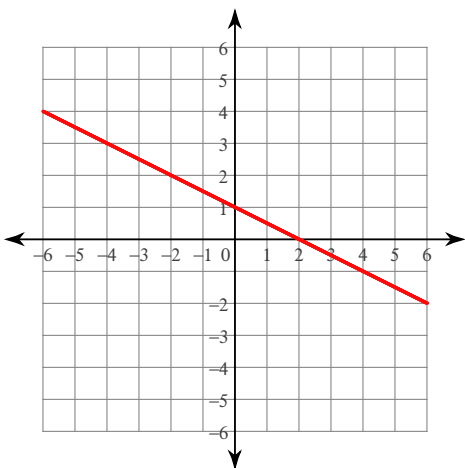
$$53) y = \frac{2}{3}x + 4$$



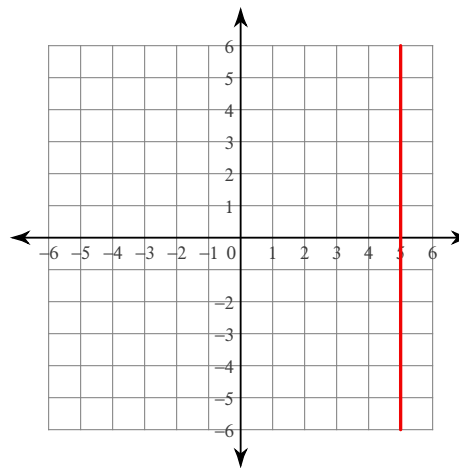
$$54) y = \frac{1}{2}x + 1$$



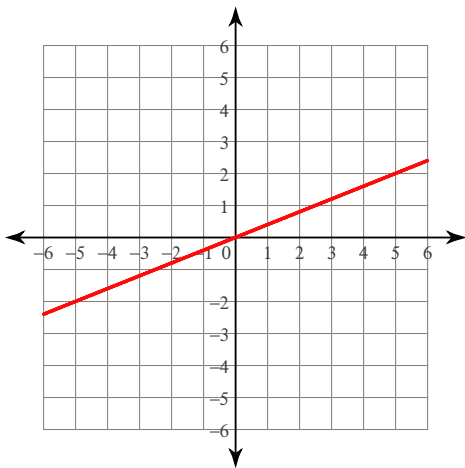
$$55) y = -\frac{1}{2}x + 1$$



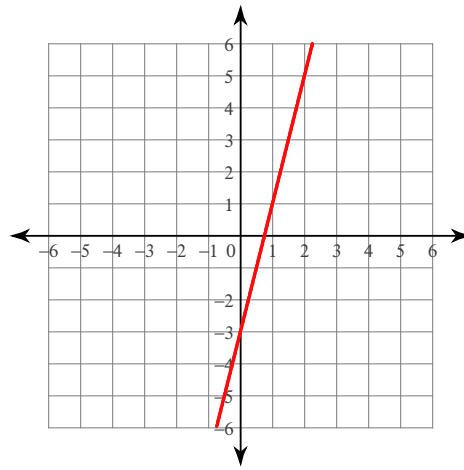
$$56) x = 5$$



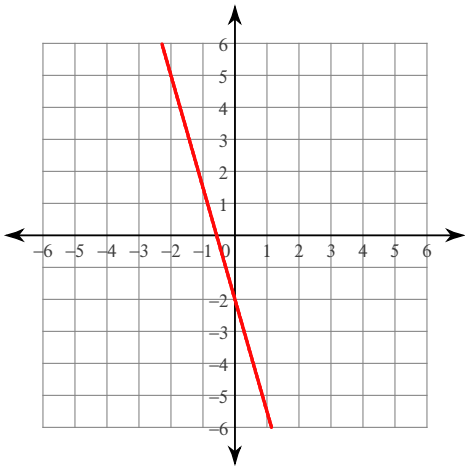
$$57) y = \frac{2}{5}x$$



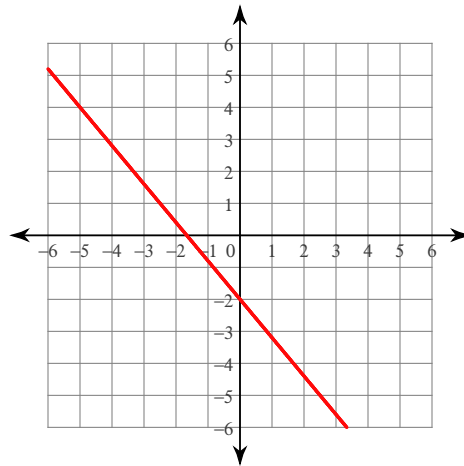
$$58) y = 4x - 3$$



$$59) y = -\frac{7}{2}x - 2$$



$$60) y = -\frac{6}{5}x - 2$$



Write the slope-intercept form of the equation of each line given the slope and y-intercept.

$$61) \text{ Slope} = \frac{5}{2}, \text{ y-intercept} = 4 \quad y = \frac{5}{2}x + 4$$

$$62) \text{ Slope} = \frac{5}{2}, \text{ y-intercept} = -4 \quad y = \frac{5}{2}x - 4$$

63) Slope = 0, y-intercept = -3

$$y = -3$$

65) Slope = $-\frac{7}{2}$, y-intercept = -2 $y = -\frac{7}{2}x - 2$

67) Slope = -7, y-intercept = -3

$$y = -7x - 3$$

69) Slope = $-\frac{3}{4}$, y-intercept = 2 $y = -\frac{3}{4}x + 2$

64) Slope = 1, y-intercept = 4

$$y = x + 4$$

66) Slope = $\frac{1}{3}$, y-intercept = -5 $y = \frac{1}{3}x - 5$

68) Slope = $\frac{3}{2}$, y-intercept = 3 $y = \frac{3}{2}x + 3$

70) Slope = $\frac{1}{2}$, y-intercept = -3 $y = \frac{1}{2}x - 3$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

71) through: (5, 2), slope = $\frac{1}{2}$ $y = \frac{1}{2}x - \frac{1}{2}$

72) through: (3, -4), slope = -2

$$y = -2x + 2$$

73) through: (-5, 0), slope = 1

$$y = x + 5$$

74) through: (-2, -3), slope = -6

$$y = -6x - 15$$

75) through: (2, 2), slope = $-\frac{3}{2}$ $y = -\frac{3}{2}x + 5$

76) through: (3, -4), slope = -3

$$y = -3x + 5$$

77) through: (-2, 0), slope = $\frac{1}{5}$ $y = \frac{1}{5}x + \frac{2}{5}$

78) through: (3, 1), slope = $-\frac{1}{3}$ $y = -\frac{1}{3}x + 2$

79) through: (5, 2), slope = $-\frac{3}{5}$ $y = -\frac{3}{5}x + 5$

80) through: (2, -5), slope = $-\frac{1}{7}$ $y = -\frac{1}{7}x - \frac{33}{7}$

Write the standard form of the equation of the line described.

81) through: (2, 3), perp. to $y = x - 2$

$$x + y = 5$$

82) through: (-2, -4), perp. to $y = -\frac{1}{4}x - 4$

$$4x - y = -4$$

83) through: (-1, -4), perp. to $y = -\frac{1}{9}x$

$$9x - y = -5$$

84) through: (0, -2), perp. to $y = \frac{1}{2}x + 5$

$$2x + y = -2$$

85) through: (4, 2), perp. to $y = -x + 5$

$$x - y = 2$$

86) through: (-4, 5), perp. to $y = \frac{4}{5}x + 1$

$$5x + 4y = 0$$

87) through: (1, -4), perp. to $y = -x - 4$

$$x - y = 5$$

88) through: $(-3, -1)$, perp. to $y = \frac{1}{6}x$

$$6x + y = -19$$

90) through: $(4, -2)$, perp. to $y = -4x + 5$

$$x - 4y = 12$$

92) through: $(-5, -1)$, perp. to $y = \frac{10}{3}x - 4$

$$3x + 10y = -25$$

94) through: $(3, -1)$, perp. to $y = \frac{1}{2}x - 4$

$$2x + y = 5$$

96) through: $(-3, 0)$, perp. to $y = \frac{3}{2}x - 1$

$$2x + 3y = -6$$

98) through: $(2, -1)$, perp. to $y = -x - 4$

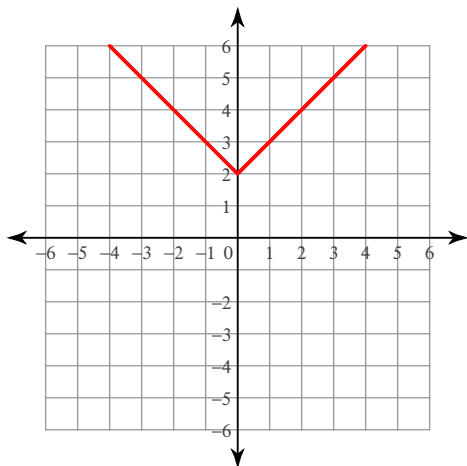
$$x - y = 3$$

100) through: $(5, 5)$, perp. to $y = -\frac{5}{7}x - 4$

$$7x - 5y = 10$$

Graph each equation.

101) $y = |x| + 2$



89) through: $(-3, 1)$, perp. to $y = \frac{1}{2}x + 5$

$$2x + y = -5$$

91) through: $(-2, 1)$, perp. to $y = \frac{2}{3}x$

$$3x + 2y = -4$$

93) through: $(1, -5)$, perp. to $y = x$

$$x + y = -4$$

95) through: $(-2, -2)$, perp. to $y = -\frac{2}{3}x + 5$

$$3x - 2y = -2$$

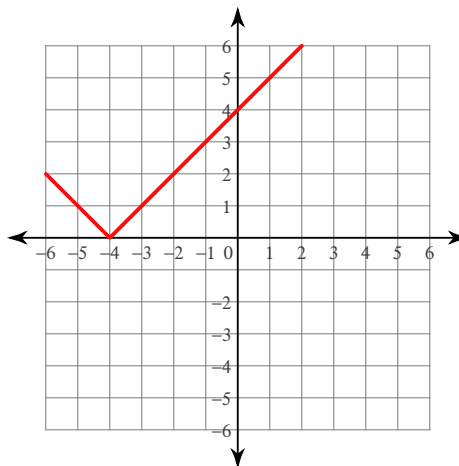
97) through: $(-4, -4)$, perp. to $y = -6x + 3$

$$x - 6y = 20$$

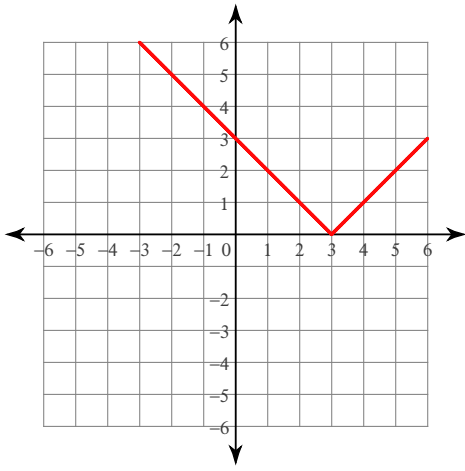
99) through: $(1, 1)$, perp. to $y = -x + 2$

$$x - y = 0$$

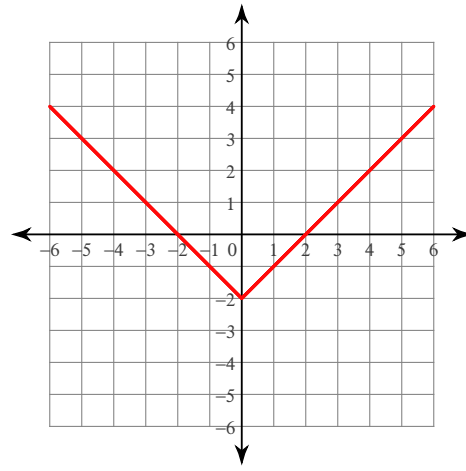
102) $y = |x + 4|$



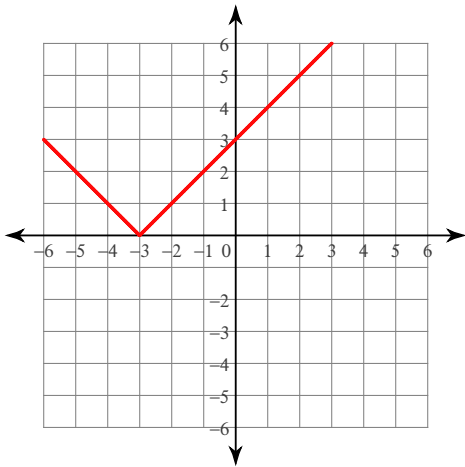
$$103) y = |x - 3|$$



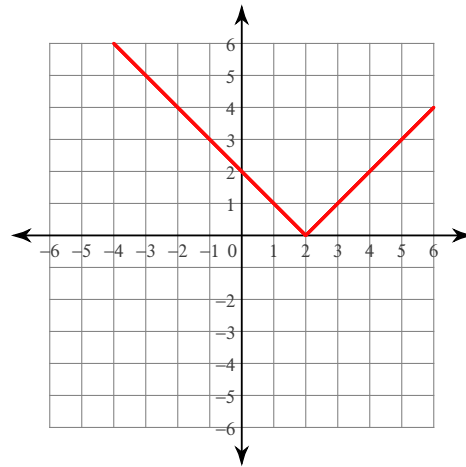
$$104) y = |x| - 2$$



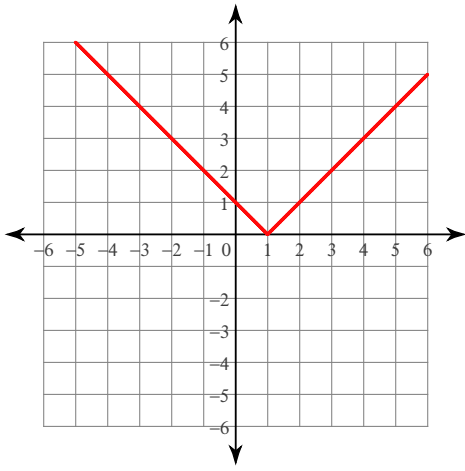
$$105) y = |x + 3|$$



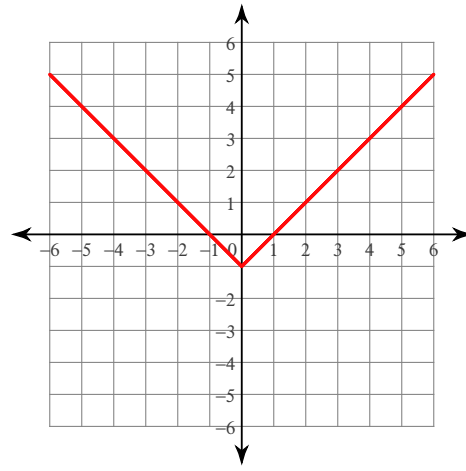
$$106) y = |x - 2|$$



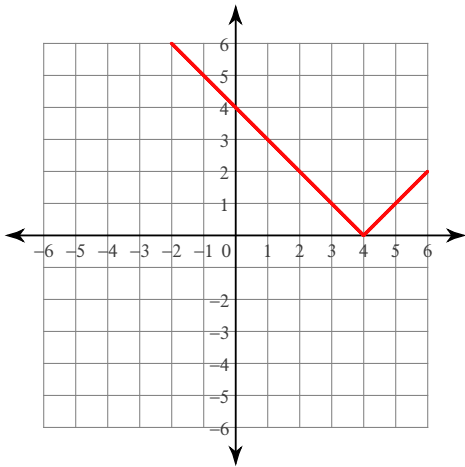
$$107) y = |x - 1|$$



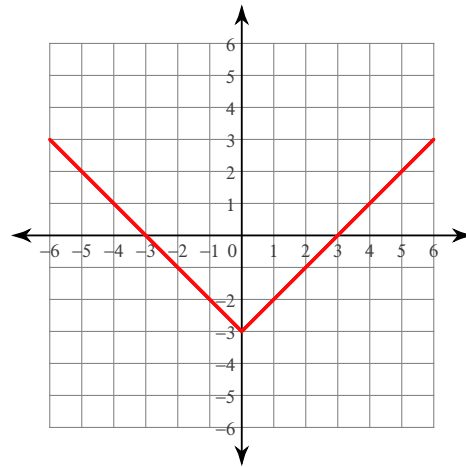
$$108) y = |x| - 1$$



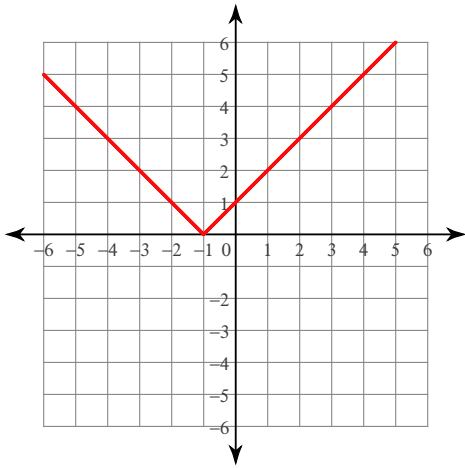
$$109) y = |x - 4|$$



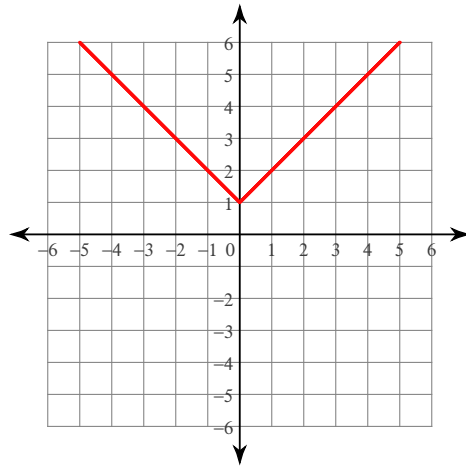
$$110) y = |x| - 3$$



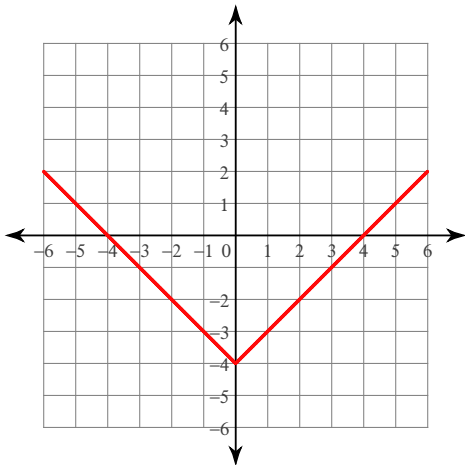
111) $y = |x + 1|$



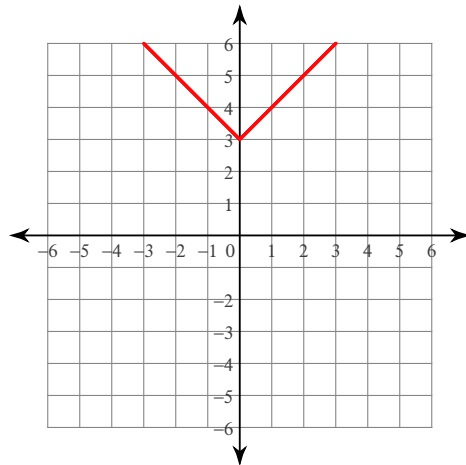
112) $y = |x| + 1$



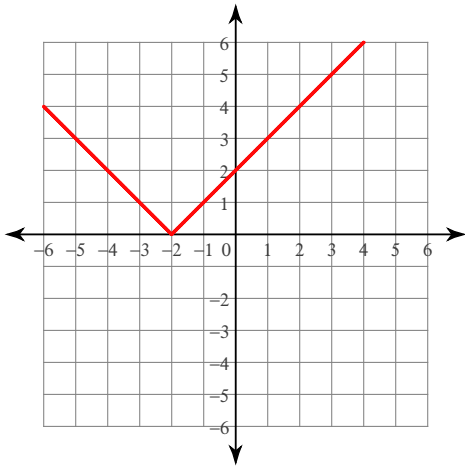
113) $y = |x| - 4$



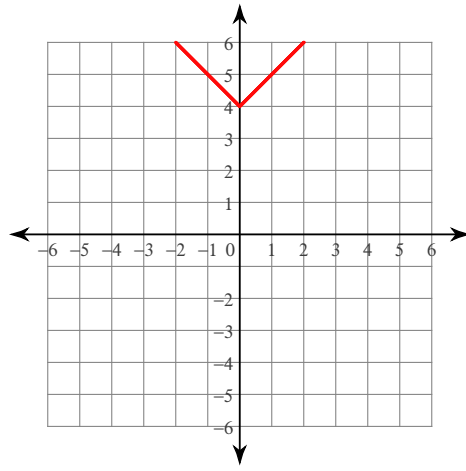
114) $y = |x| + 3$



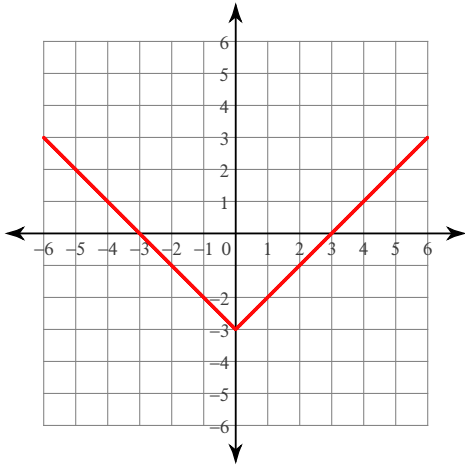
$$115) y = |x + 2|$$



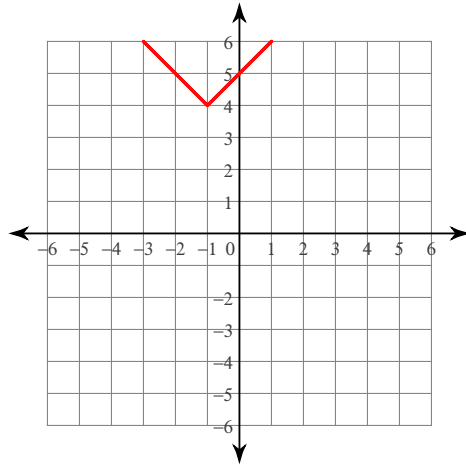
$$116) y = |x| + 4$$



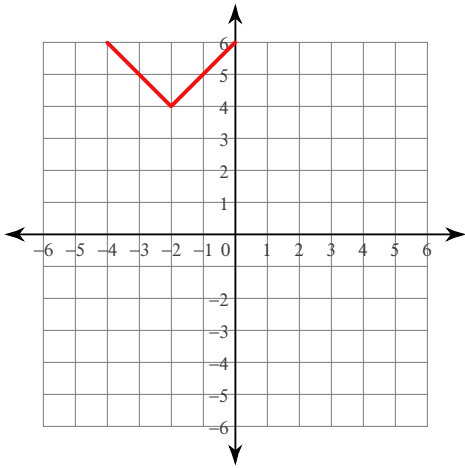
$$117) y = |x| - 3$$



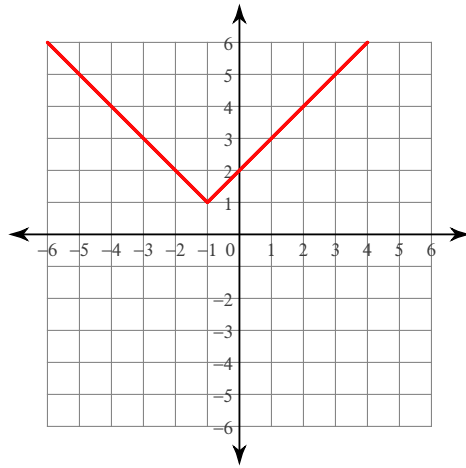
$$118) y = |x + 1| + 4$$



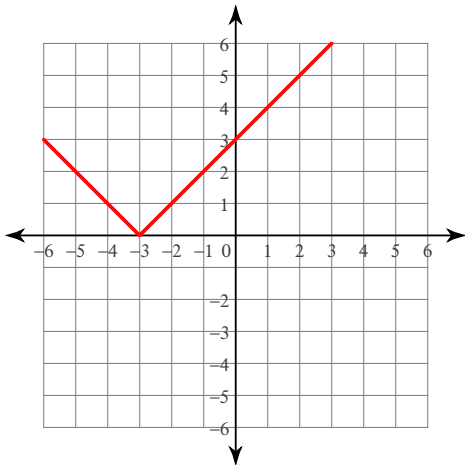
$$119) y = |x + 2| + 4$$



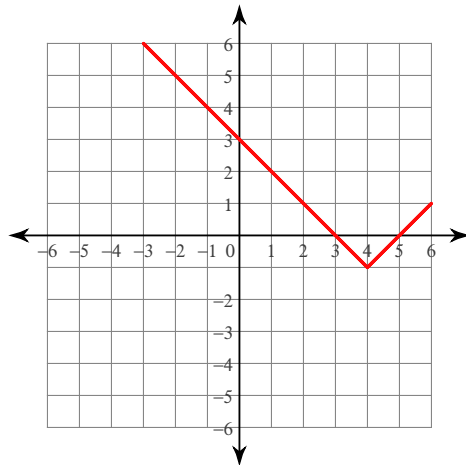
$$120) y = |x + 1| + 1$$



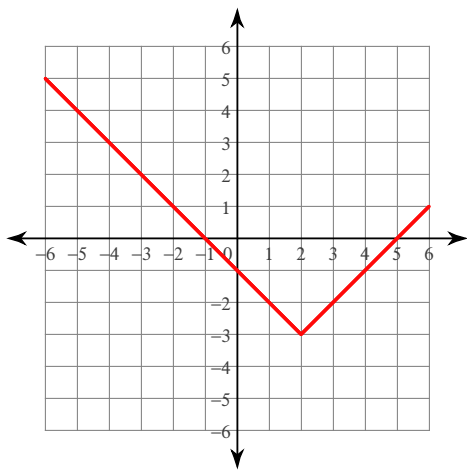
$$121) y = |x + 3|$$



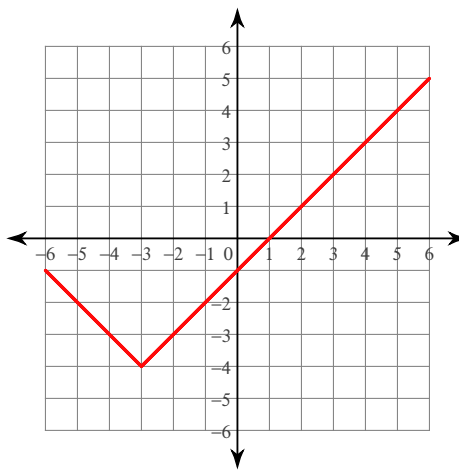
$$122) y = |x - 4| - 1$$



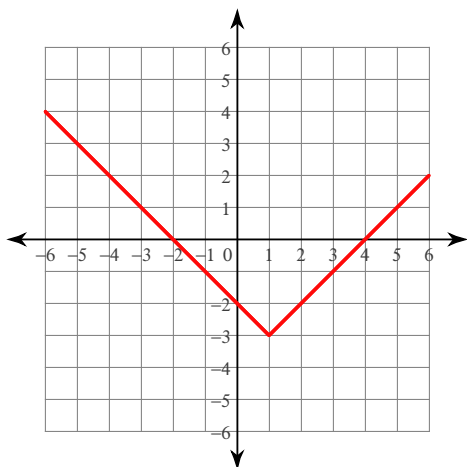
$$123) y = |x - 2| - 3$$



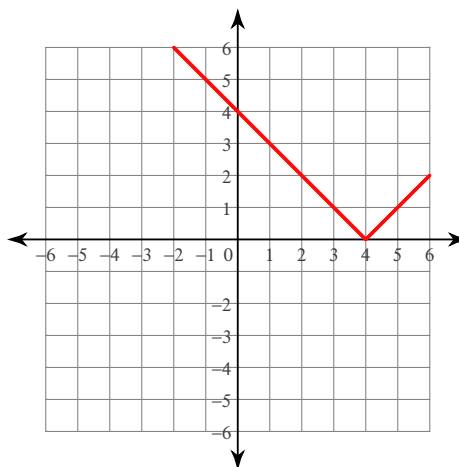
$$124) y = |x + 3| - 4$$



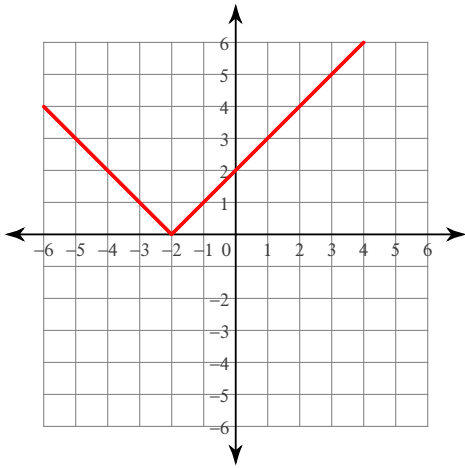
$$125) y = |x - 1| - 3$$



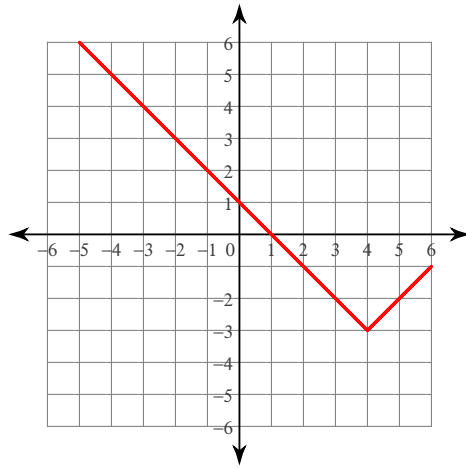
$$126) y = |x - 4|$$



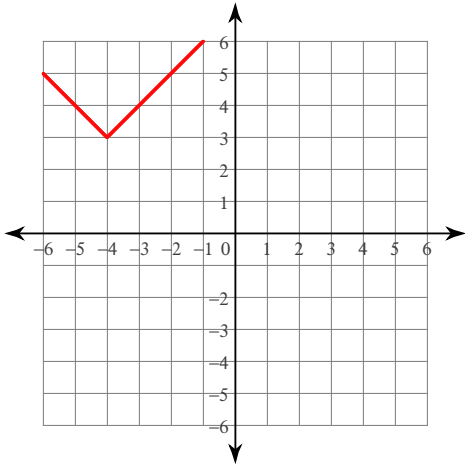
$$127) y = |x + 2|$$



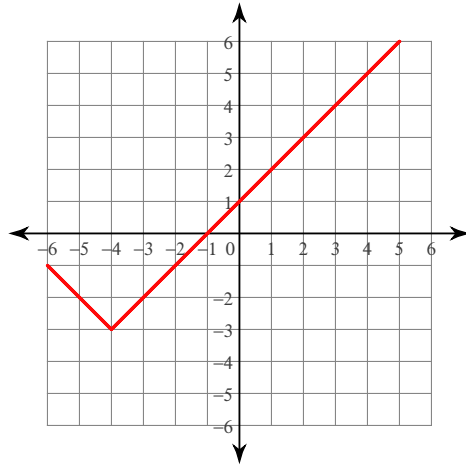
$$128) y = |x - 4| - 3$$



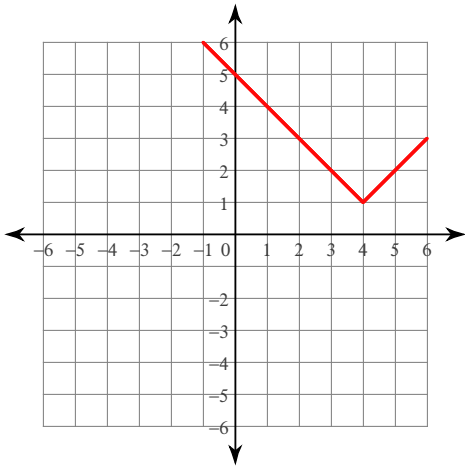
$$129) y = |x + 4| + 3$$



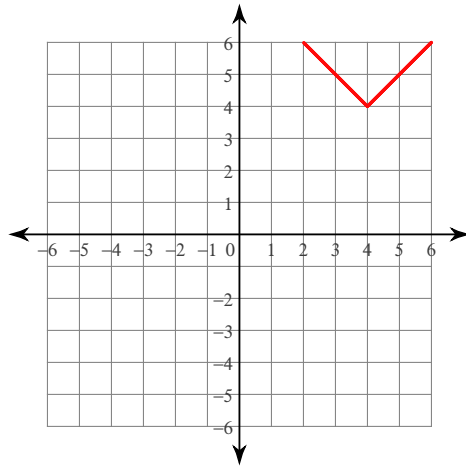
$$130) y = |x + 4| - 3$$



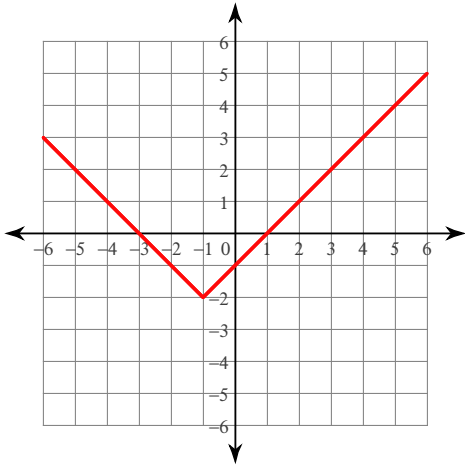
$$131) y = |x - 4| + 1$$



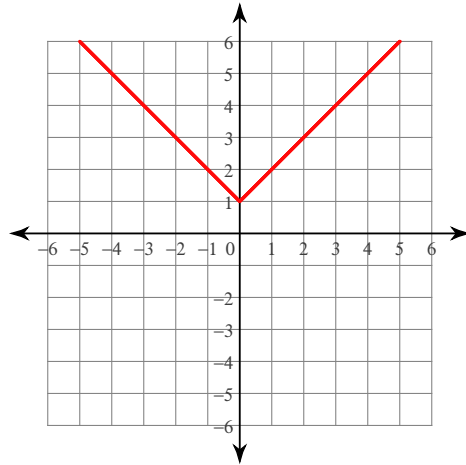
$$132) y = |x - 4| + 4$$



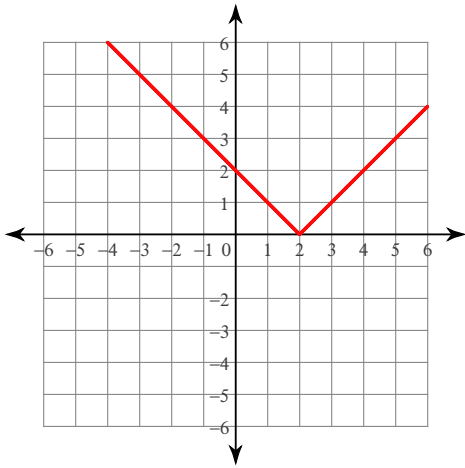
$$133) y = |x + 1| - 2$$



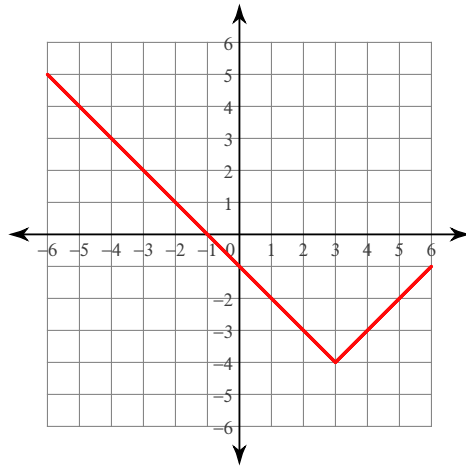
$$134) y = |x| + 1$$



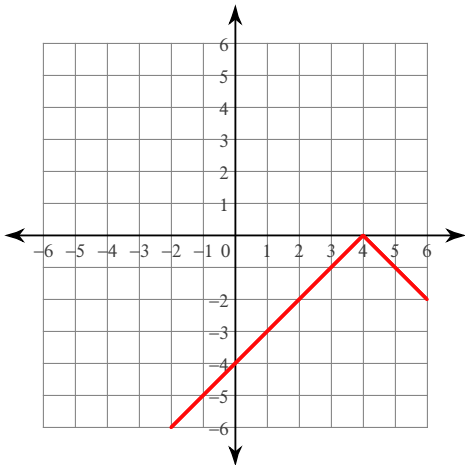
$$135) y = |x - 2|$$



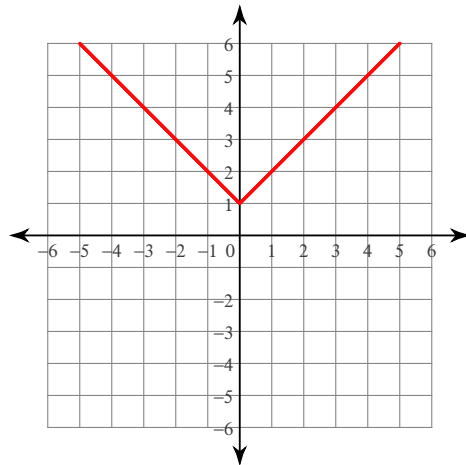
$$136) y = |x - 3| - 4$$



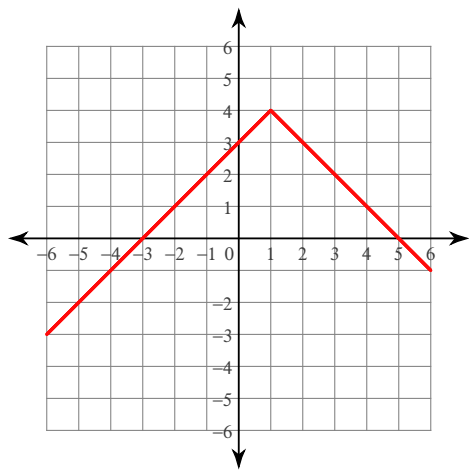
$$137) y = -|x - 4|$$



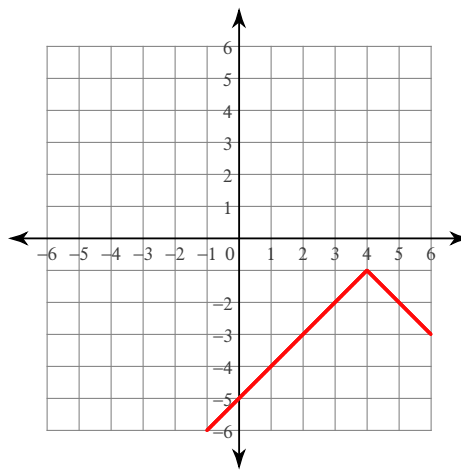
$$138) y = |x| + 1$$



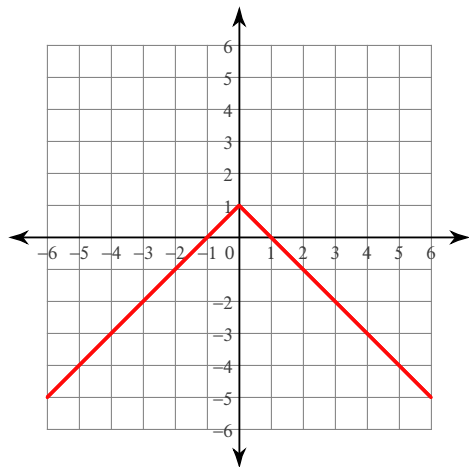
$$139) y = -|x - 1| + 4$$



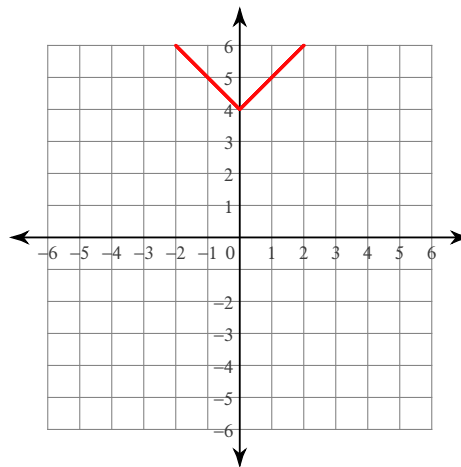
$$140) y = -|x - 4| - 1$$



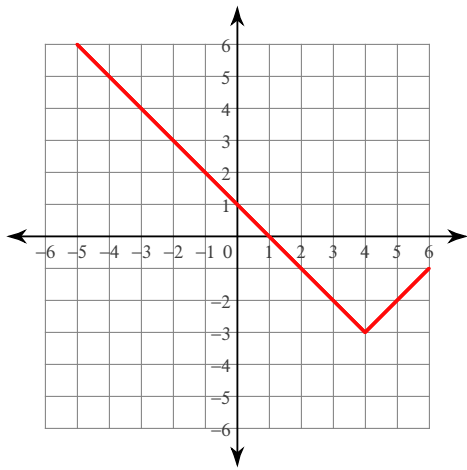
$$141) y = -|x| + 1$$



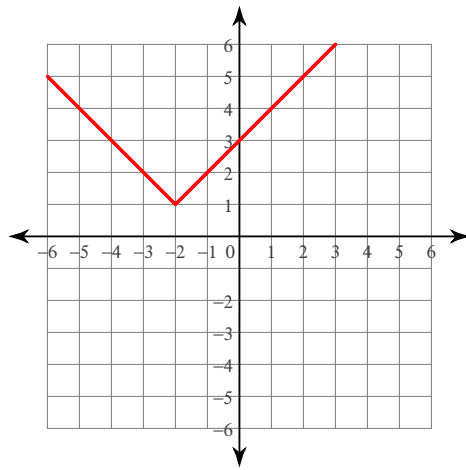
$$142) y = |x| + 4$$



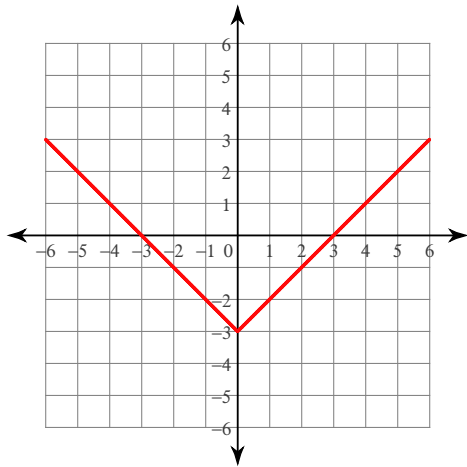
$$143) y = |x - 4| - 3$$



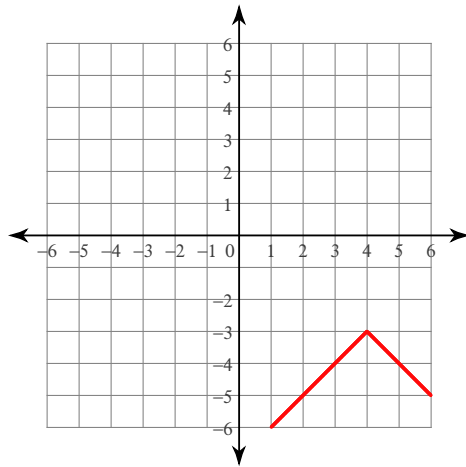
$$144) y = |x + 2| + 1$$



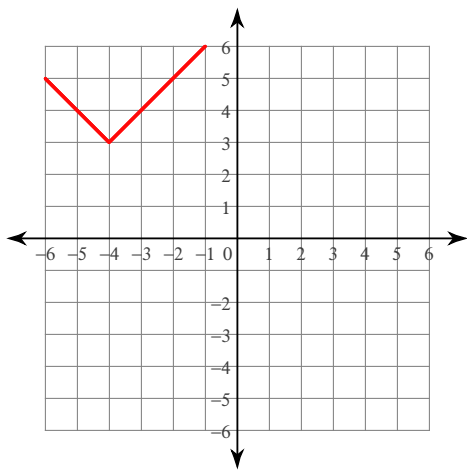
$$145) y = |x| - 3$$



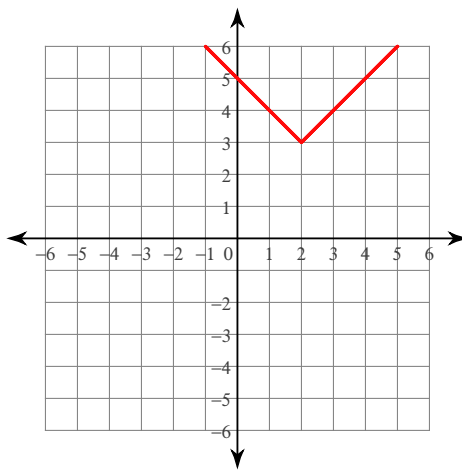
$$146) y = -|x - 4| - 3$$



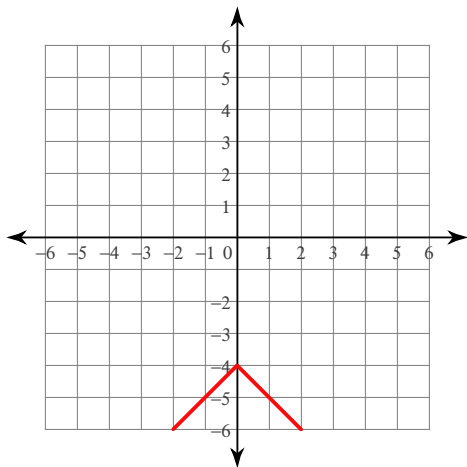
$$147) y = |x + 4| + 3$$



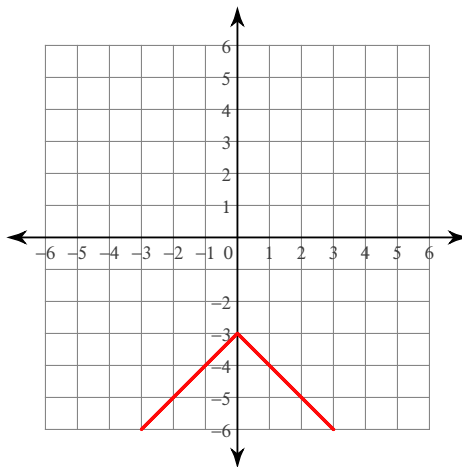
$$148) y = |x - 2| + 3$$



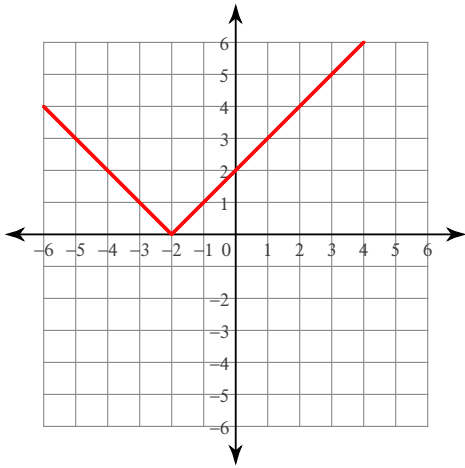
$$149) y = -|x| - 4$$



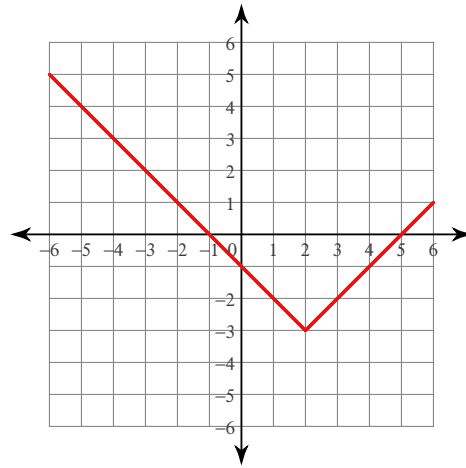
$$150) y = -|x| - 3$$



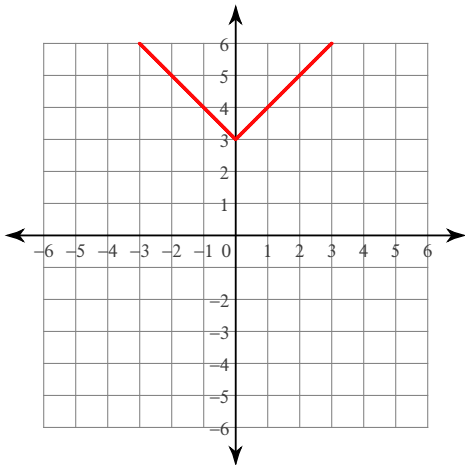
$$151) y = |x + 2|$$



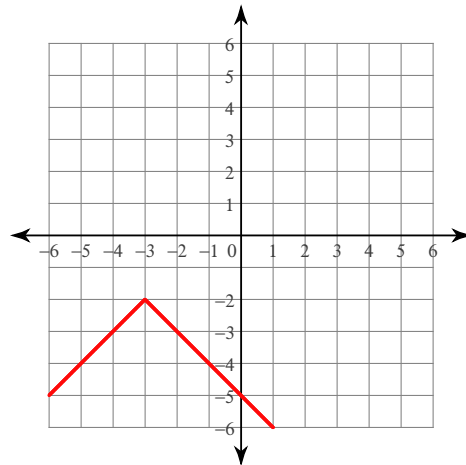
$$152) y = |x - 2| - 3$$



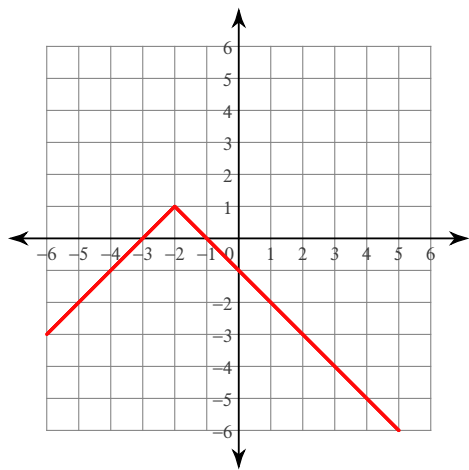
$$153) y = |x| + 3$$



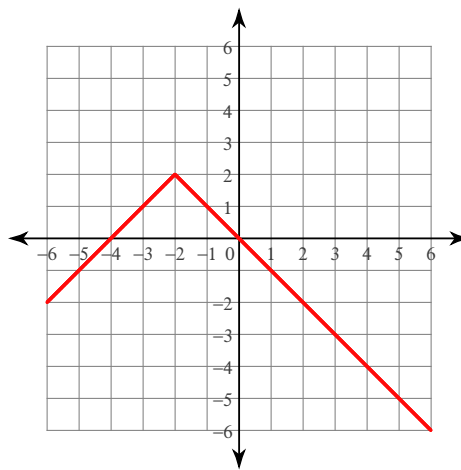
$$154) y = -|x + 3| - 2$$



$$155) y = -|x + 2| + 1$$

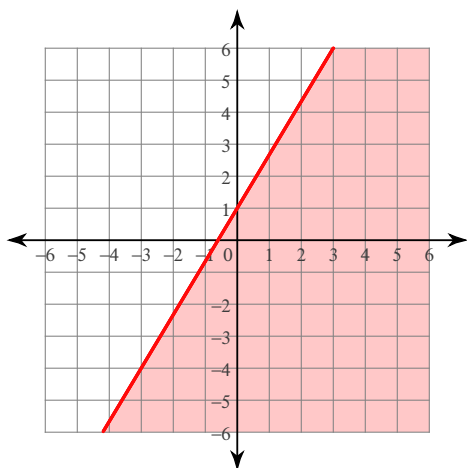


$$156) y = -|x + 2| + 2$$

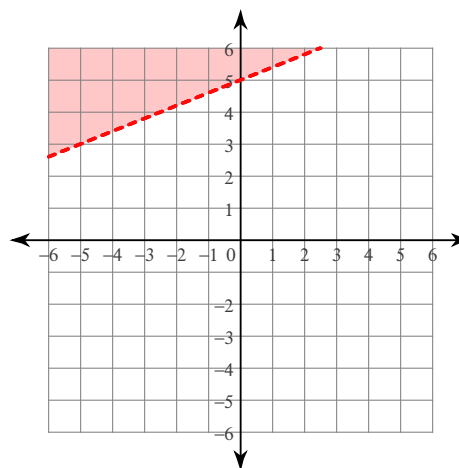


Sketch the graph of each linear inequality.

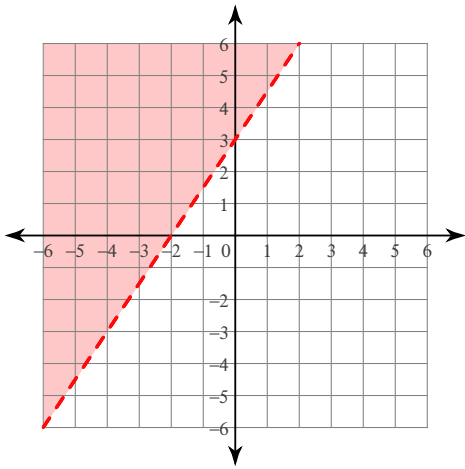
$$157) y \leq \frac{5}{3}x + 1$$



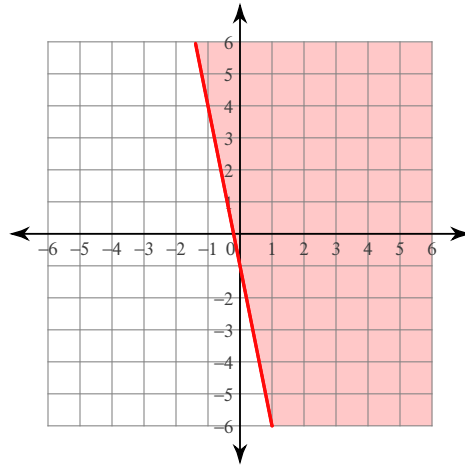
$$158) y > \frac{2}{5}x + 5$$



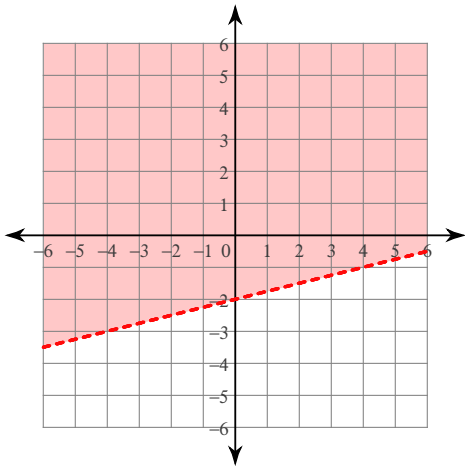
$$159) y > \frac{3}{2}x + 3$$



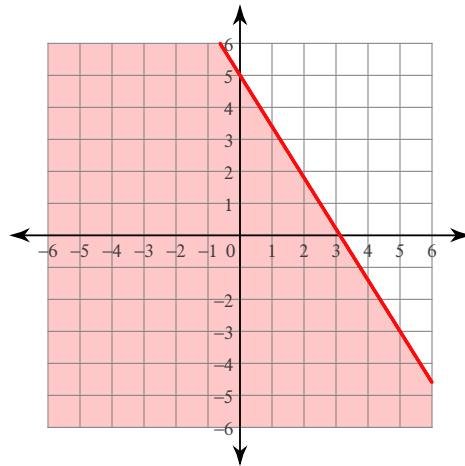
$$160) y \geq -5x - 1$$



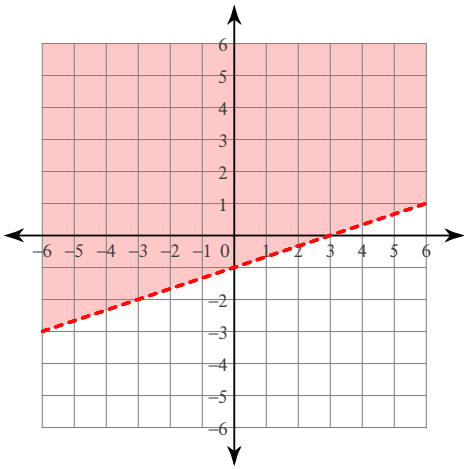
$$161) y > \frac{1}{4}x - 2$$



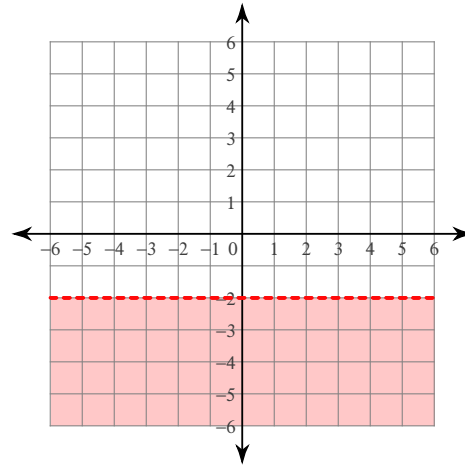
$$162) y \leq -\frac{8}{5}x + 5$$



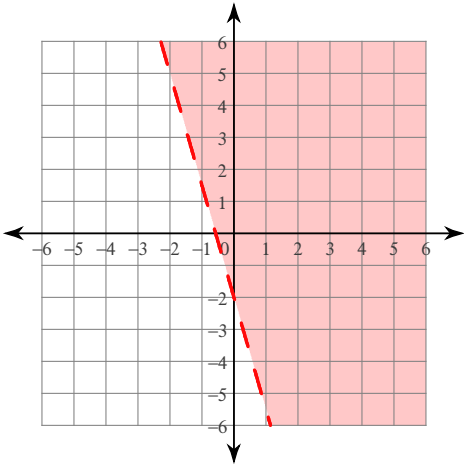
$$163) y > \frac{1}{3}x - 1$$



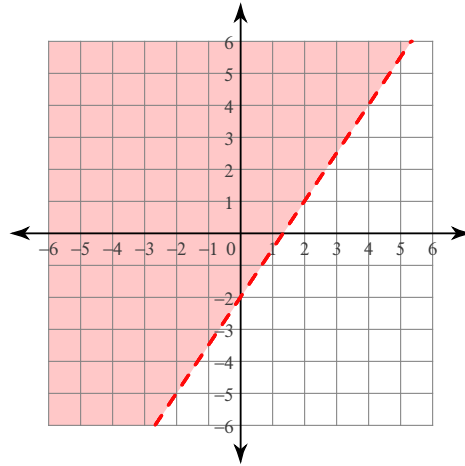
$$164) y < -2$$



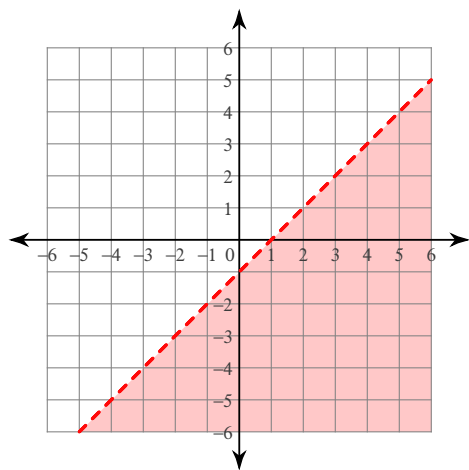
$$165) y > -\frac{7}{2}x - 2$$



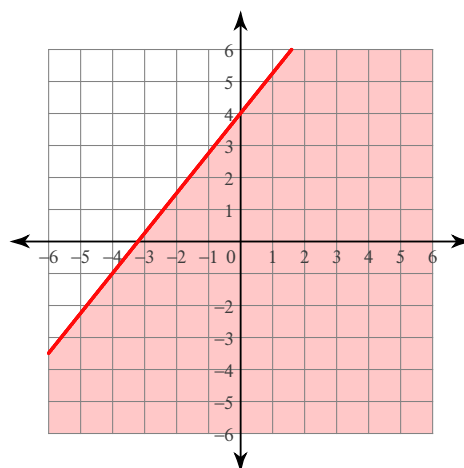
$$166) y > \frac{3}{2}x - 2$$



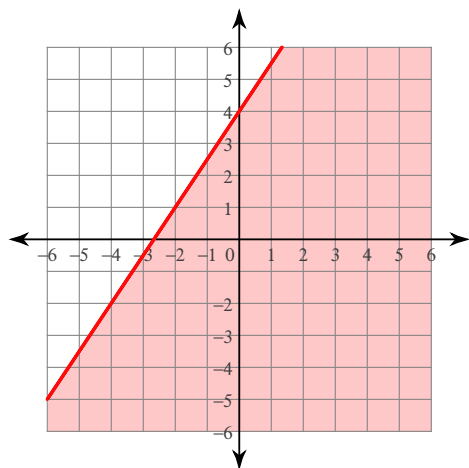
$$167) y < x - 1$$



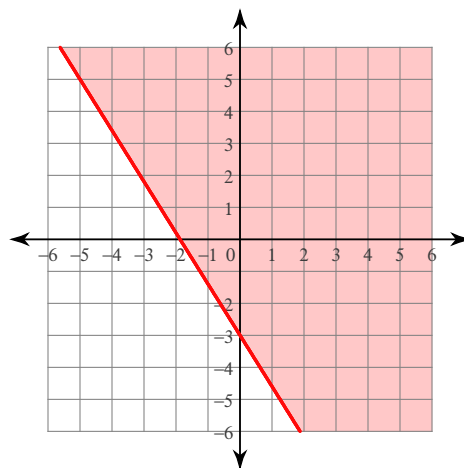
$$168) y \leq \frac{5}{4}x + 4$$



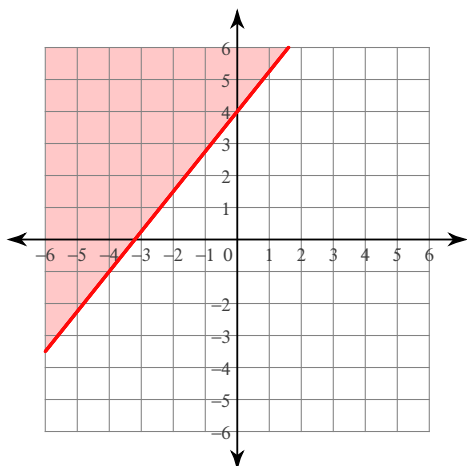
$$169) y \leq \frac{3}{2}x + 4$$



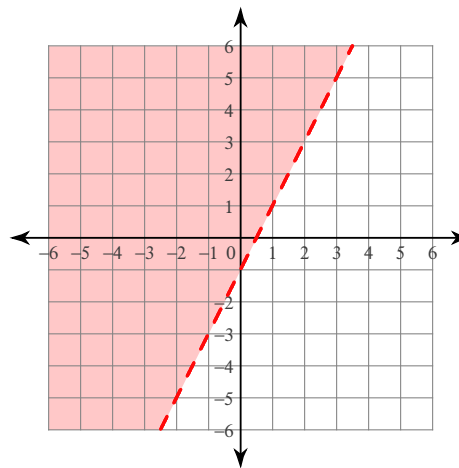
$$170) y \geq -\frac{8}{5}x - 3$$



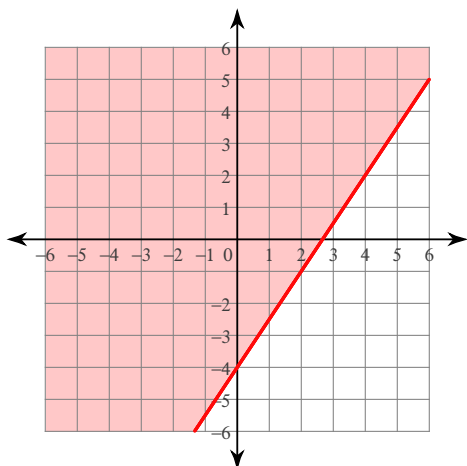
$$171) y \geq \frac{5}{4}x + 4$$



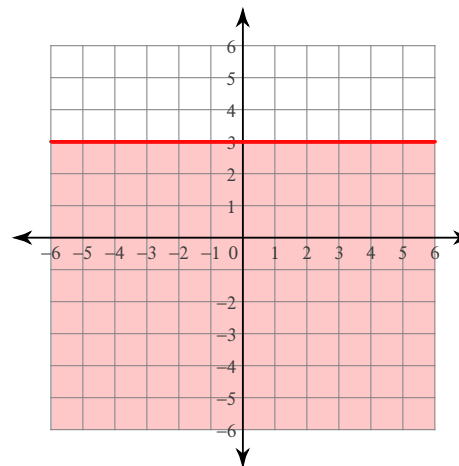
$$172) y > 2x - 1$$



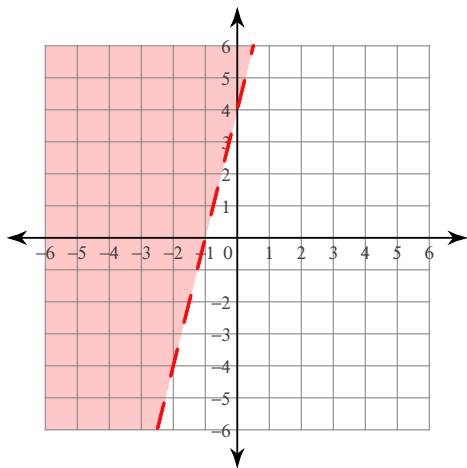
$$173) y \geq \frac{3}{2}x - 4$$



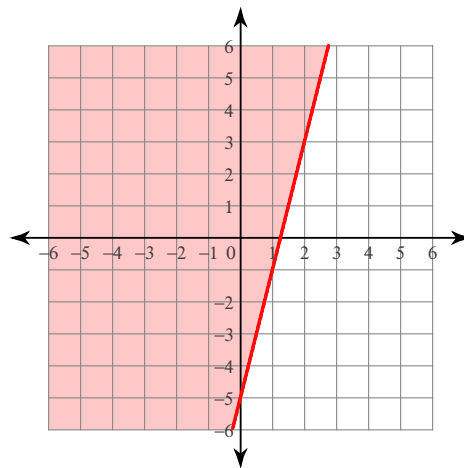
$$174) y \leq 3$$



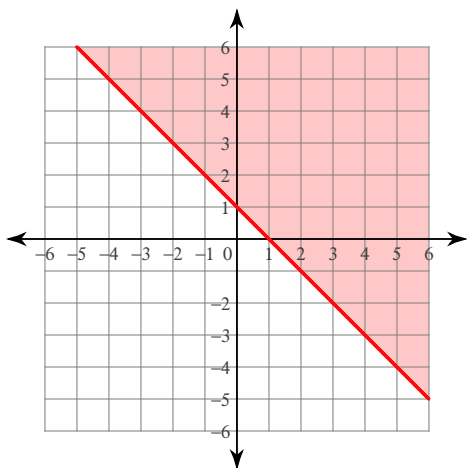
$$175) y > 4x + 4$$



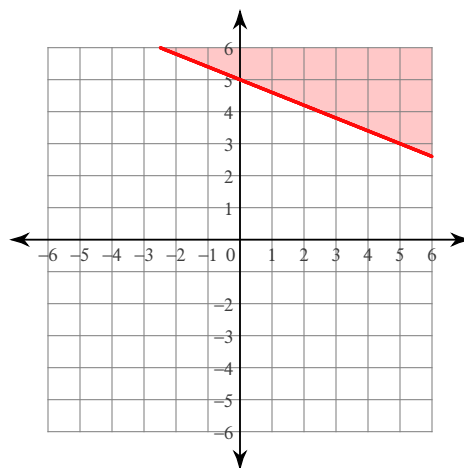
$$176) y \geq 4x - 5$$



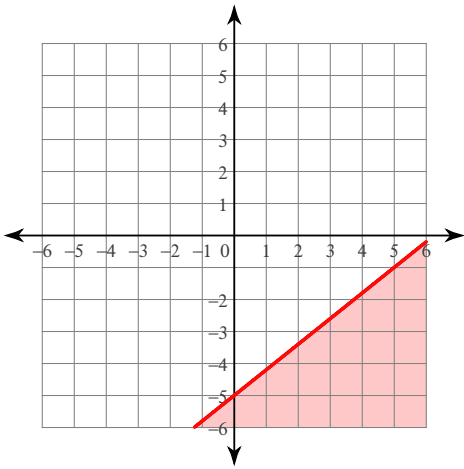
$$177) y \geq -x + 1$$



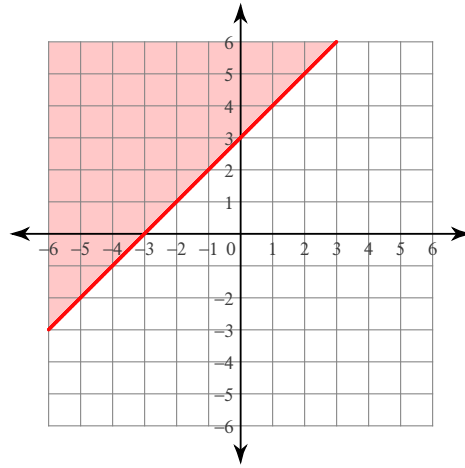
$$178) y \geq -\frac{2}{5}x + 5$$



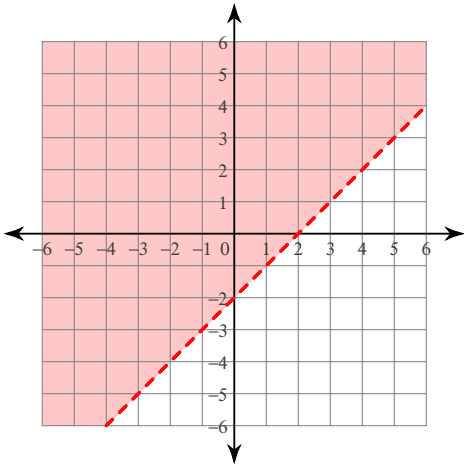
$$179) y \leq \frac{4}{5}x - 5$$



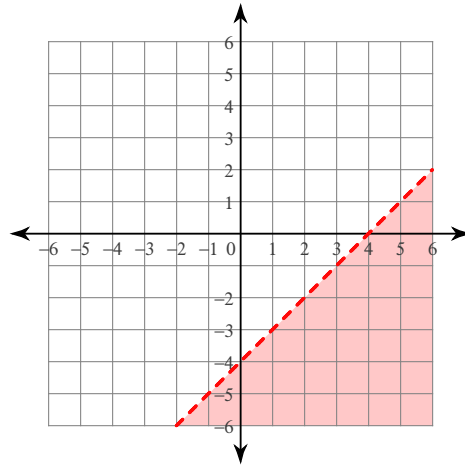
$$180) y \geq x + 3$$



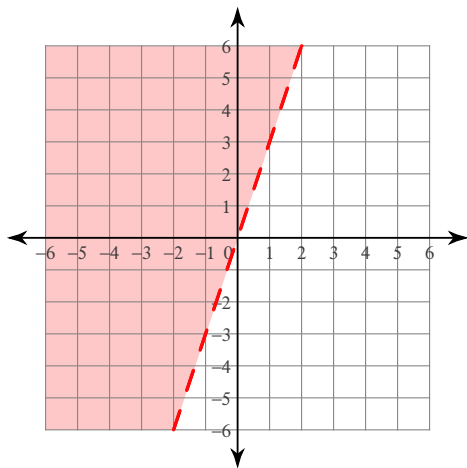
$$181) y > x - 2$$



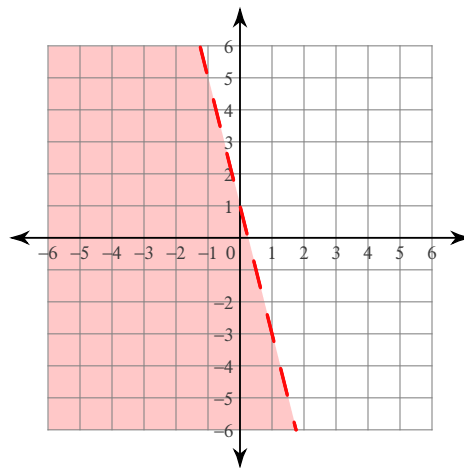
$$182) y < x - 4$$



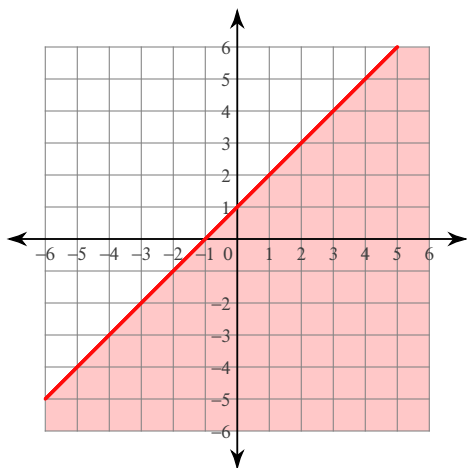
183) $y > 3x$



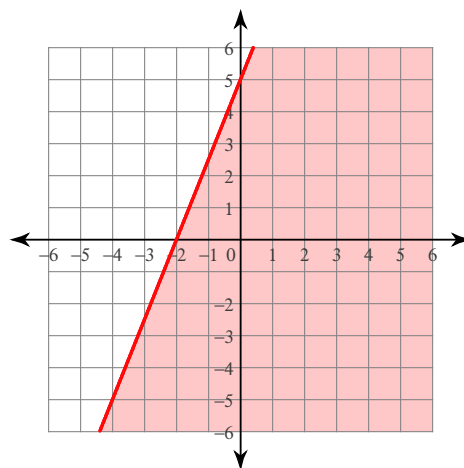
184) $y < -4x + 1$



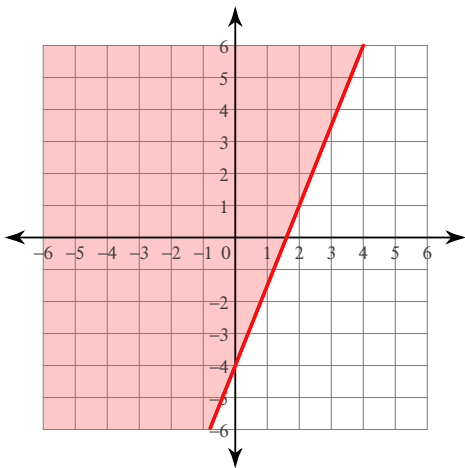
185) $y \leq x + 1$



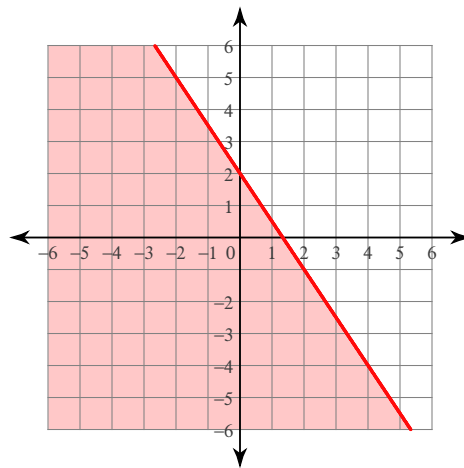
186) $y \leq \frac{5}{2}x + 5$



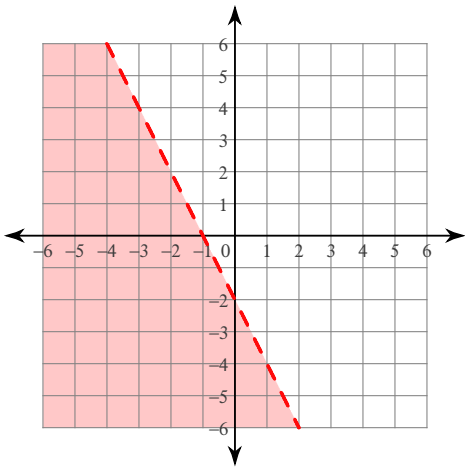
$$187) y \geq \frac{5}{2}x - 4$$



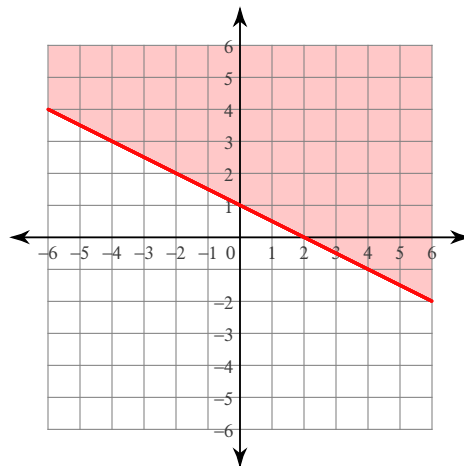
$$188) y \leq -\frac{3}{2}x + 2$$



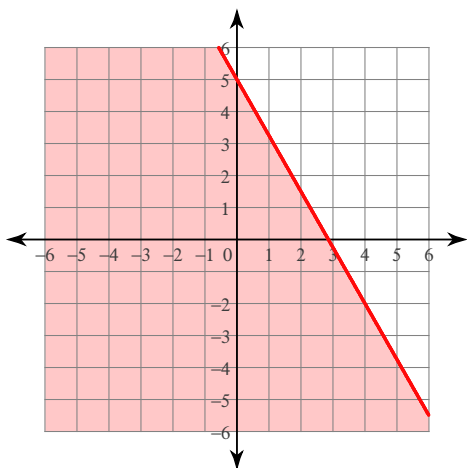
$$189) y < -2x - 2$$



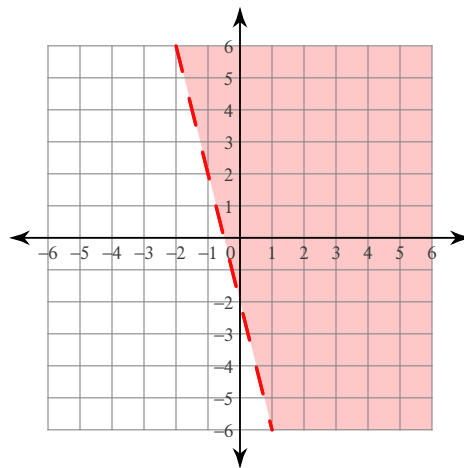
$$190) y \geq -\frac{1}{2}x + 1$$



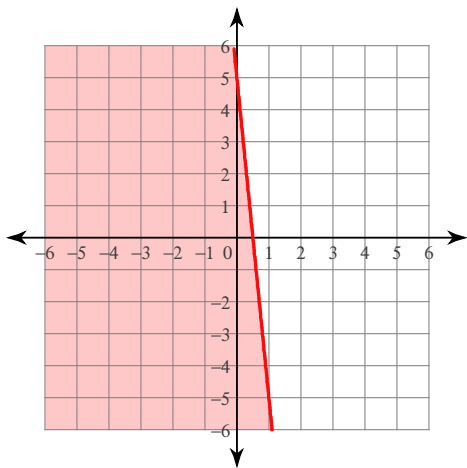
$$191) y \leq -\frac{7}{4}x + 5$$



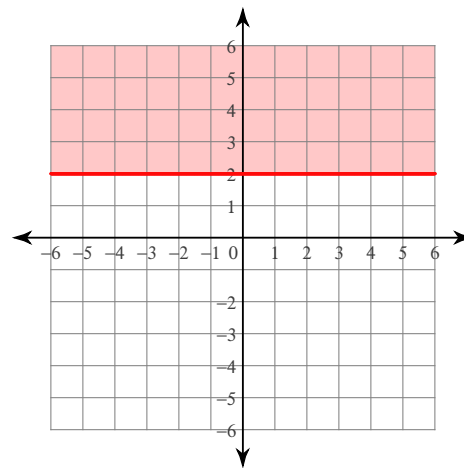
$$192) y > -4x - 2$$



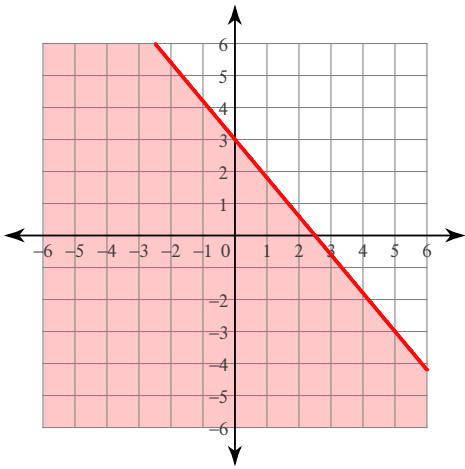
$$193) y \leq -10x + 5$$



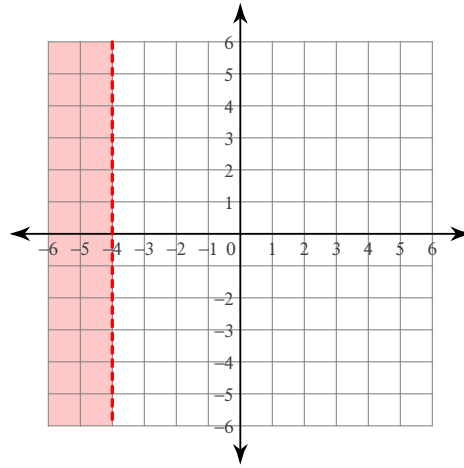
$$194) y \geq 2$$



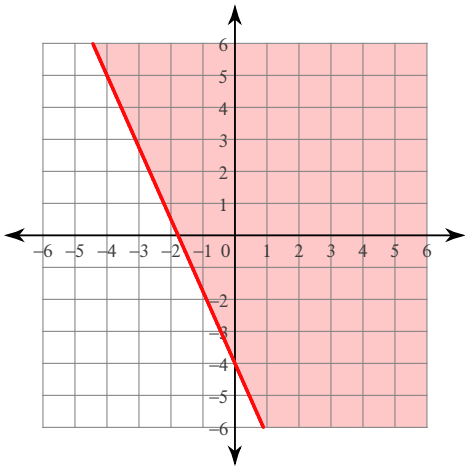
$$195) y \leq -\frac{6}{5}x + 3$$



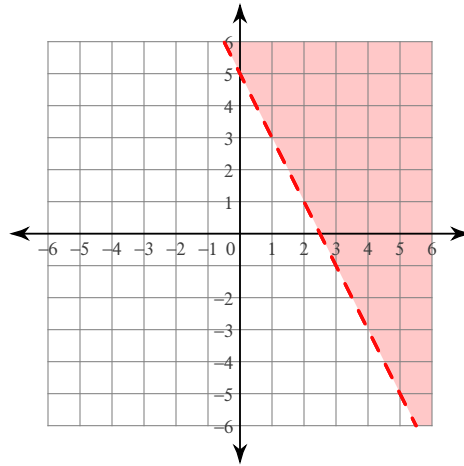
$$196) x < -4$$



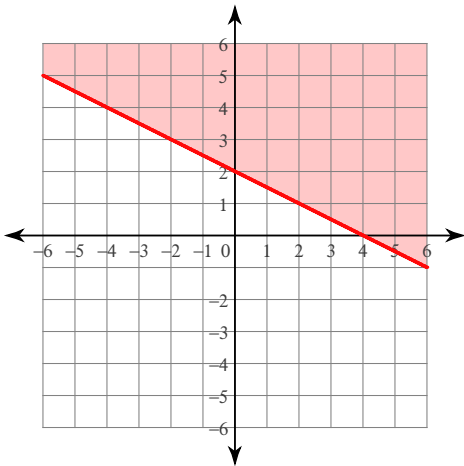
$$197) y \geq -\frac{9}{4}x - 4$$



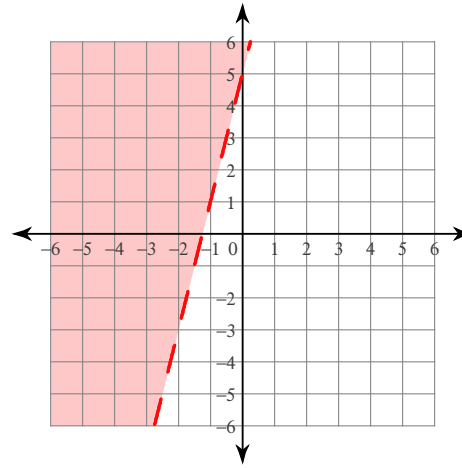
$$198) y > -2x + 5$$



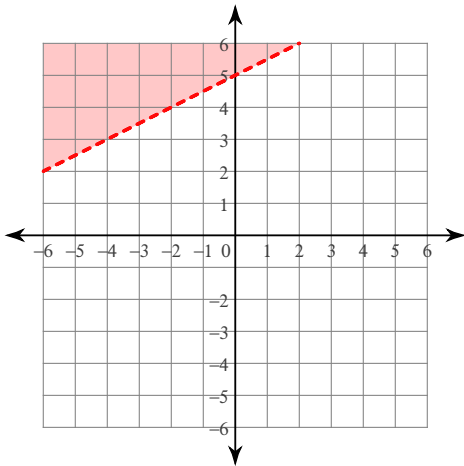
$$199) y \geq -\frac{1}{2}x + 2$$



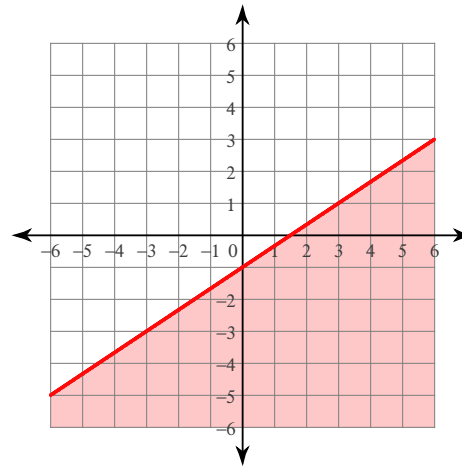
$$200) y > 4x + 5$$



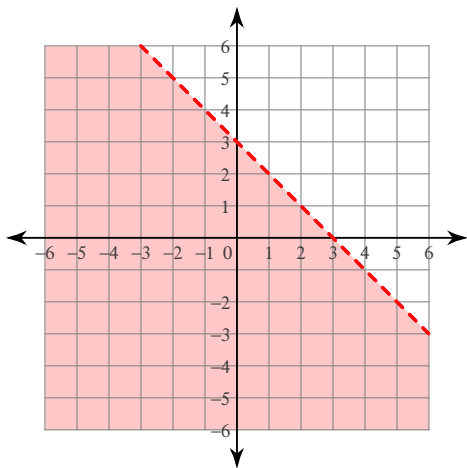
$$201) y > \frac{1}{2}x + 5$$



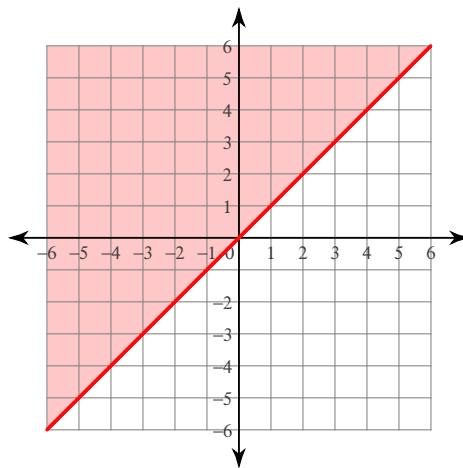
$$202) y \leq \frac{2}{3}x - 1$$



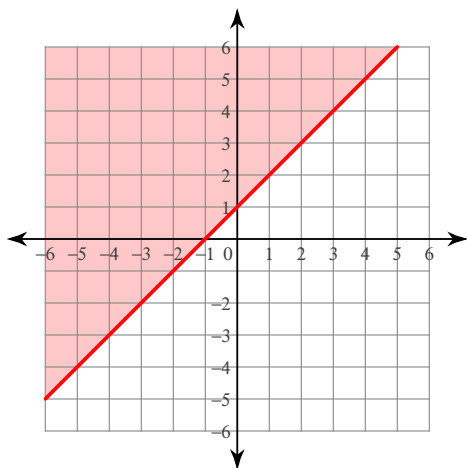
203) $y < -x + 3$



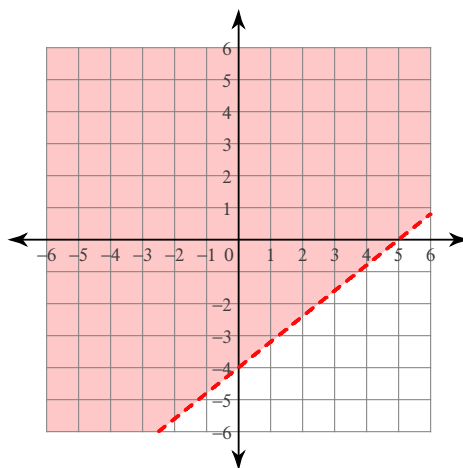
204) $y \geq x$



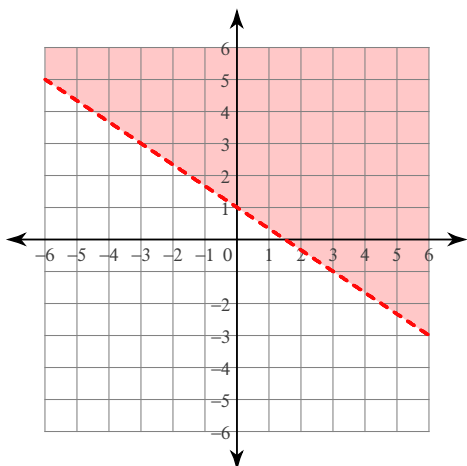
205) $y \geq x + 1$



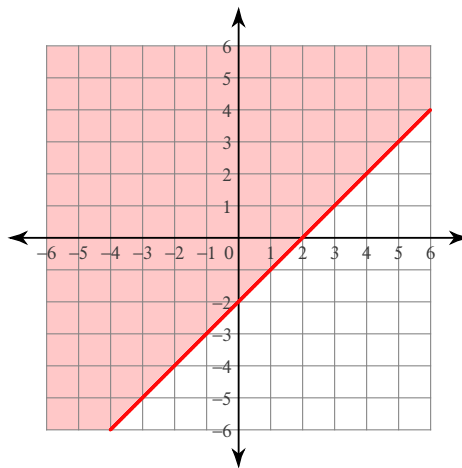
206) $y > \frac{4}{5}x - 4$



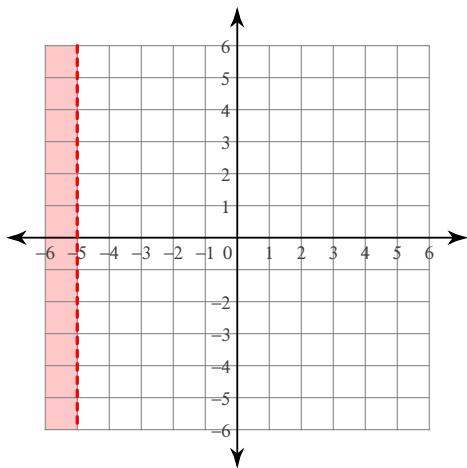
$$207) y > -\frac{2}{3}x + 1$$



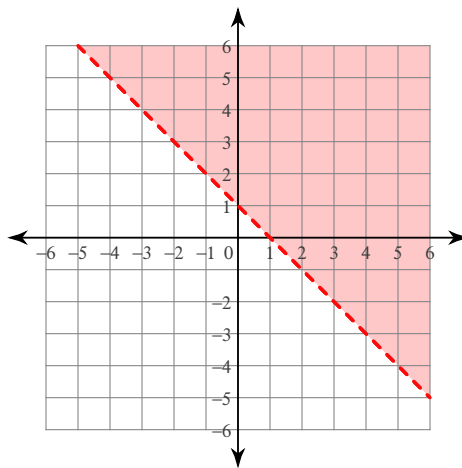
$$208) y \geq x - 2$$



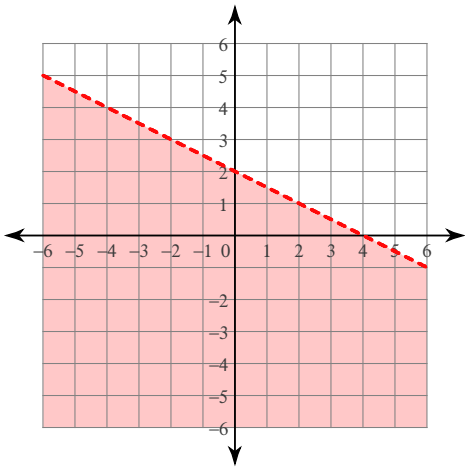
$$209) x < -5$$



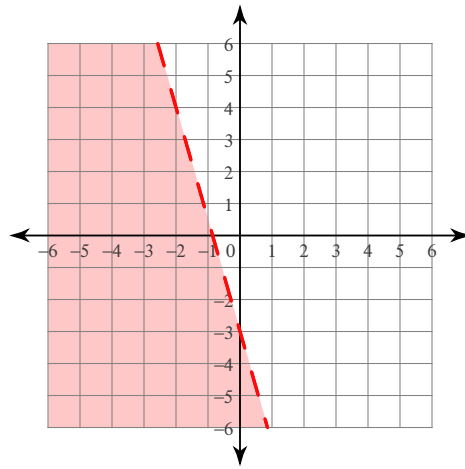
$$210) y > -x + 1$$



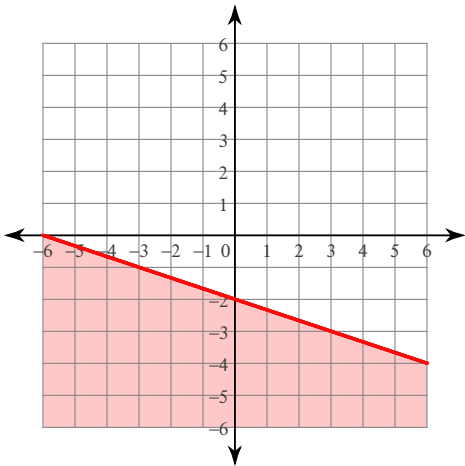
$$211) y < -\frac{1}{2}x + 2$$



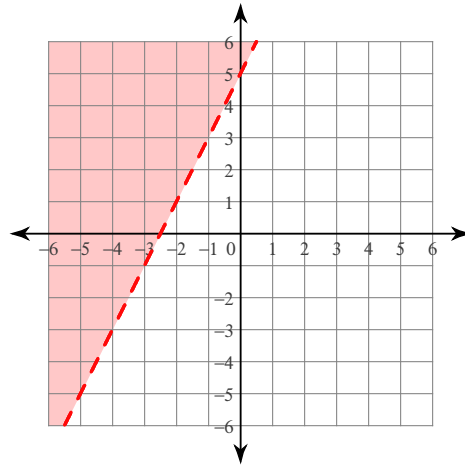
$$212) y < -\frac{7}{2}x - 3$$



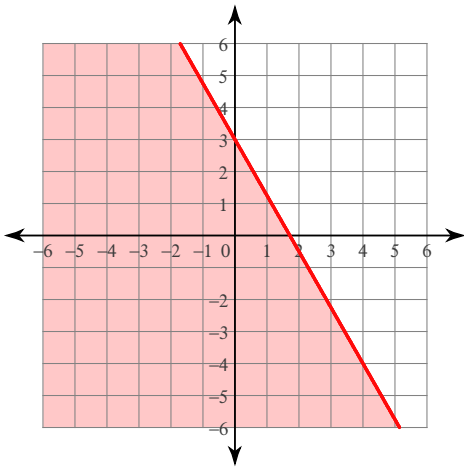
$$213) y \leq -\frac{1}{3}x - 2$$



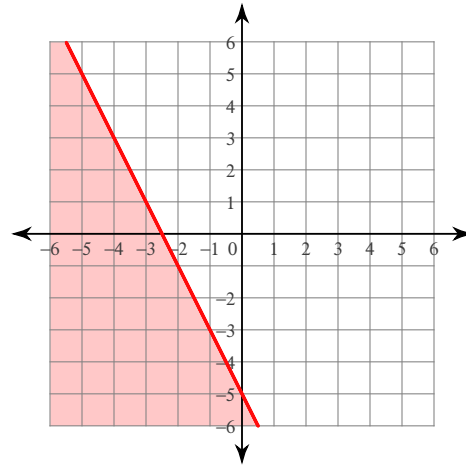
$$214) y > 2x + 5$$



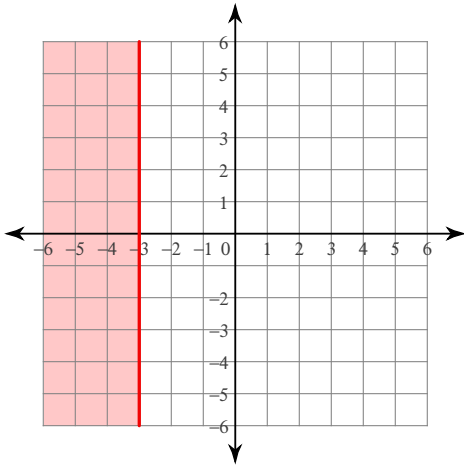
$$215) y \leq -\frac{7}{4}x + 3$$



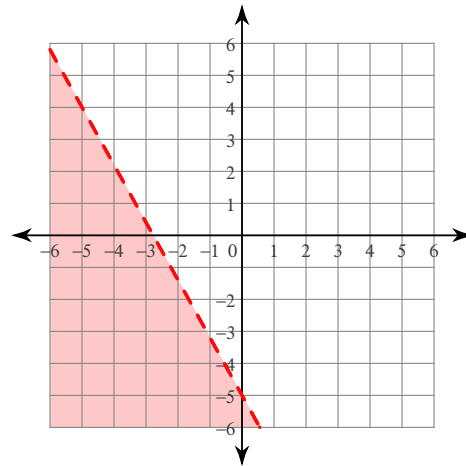
$$216) y \leq -2x - 5$$



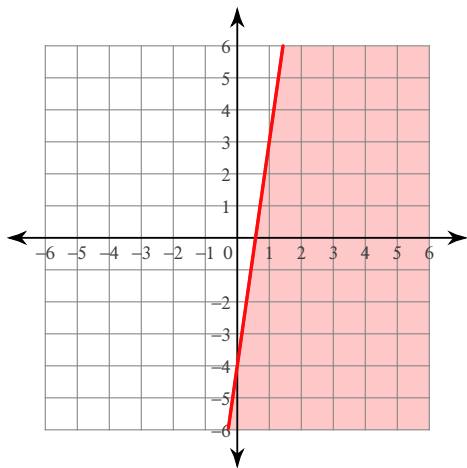
$$217) x \leq -3$$



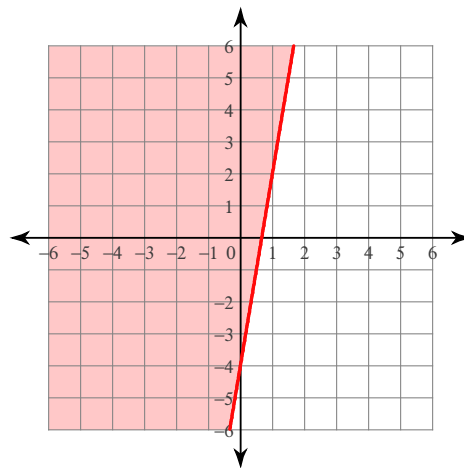
$$218) y < -\frac{9}{5}x - 5$$



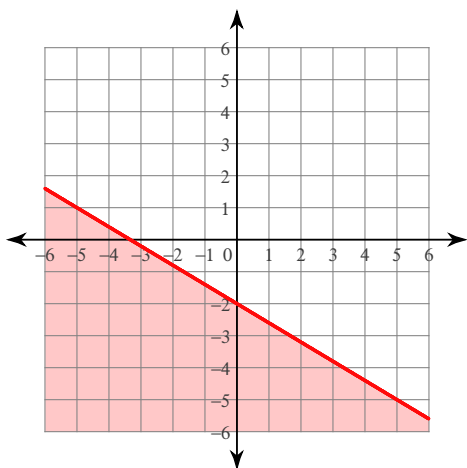
219) $y \leq 7x - 4$



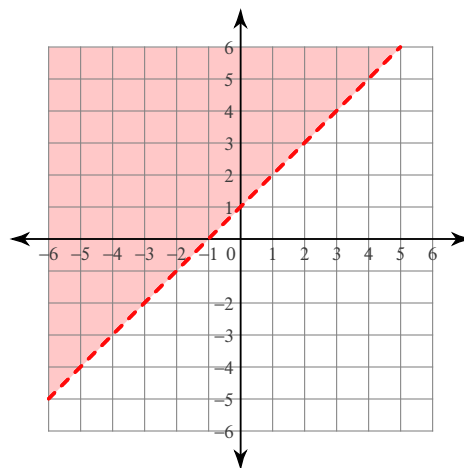
220) $y \geq 6x - 4$



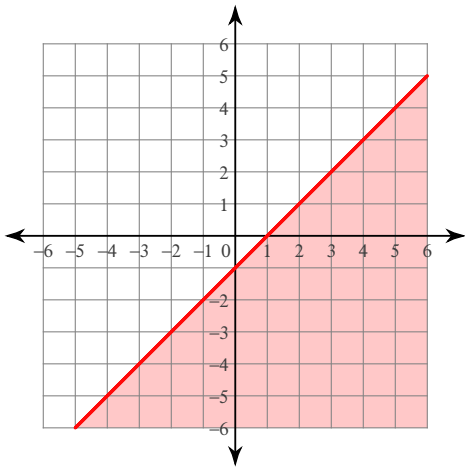
221) $y \leq -\frac{3}{5}x - 2$



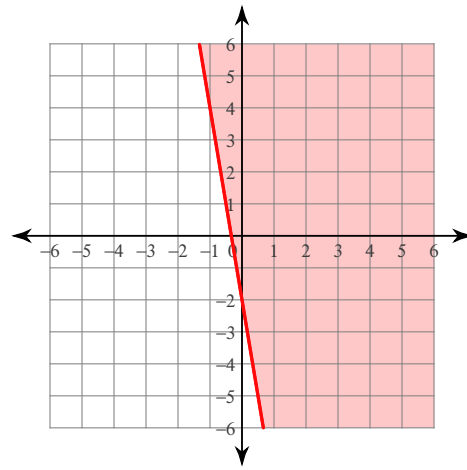
222) $y > x + 1$



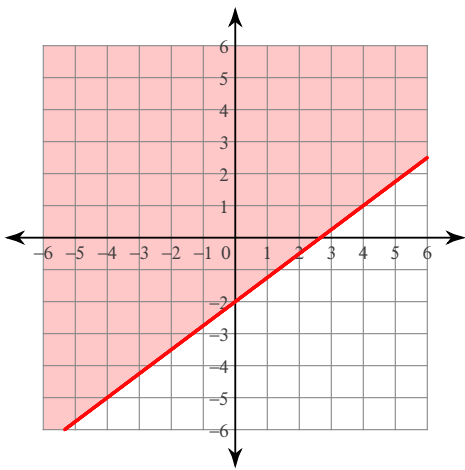
$$223) y \leq x - 1$$



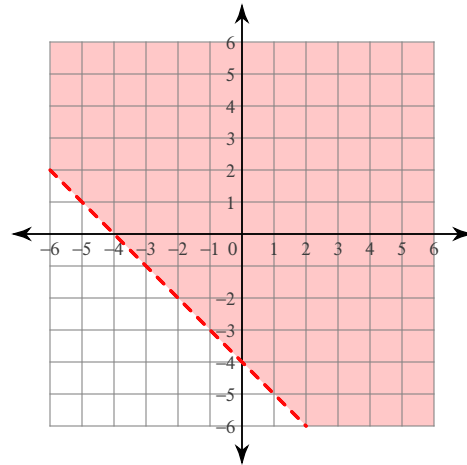
$$224) y \geq -6x - 2$$



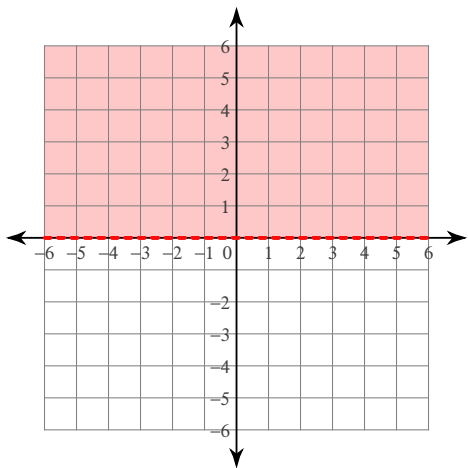
$$225) y \geq \frac{3}{4}x - 2$$



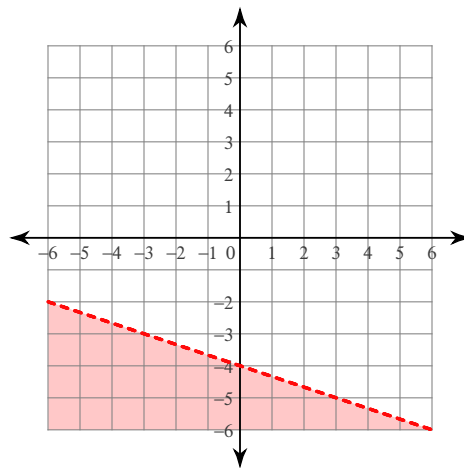
$$226) y > -x - 4$$



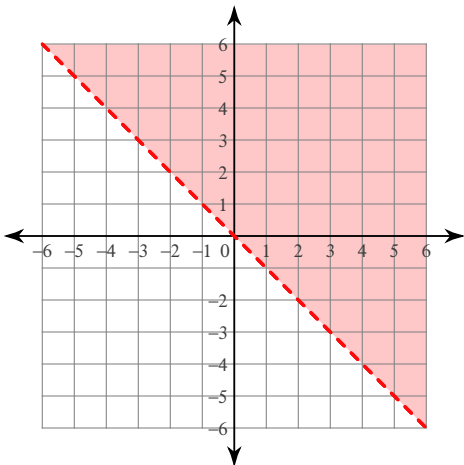
227) $y > 0$



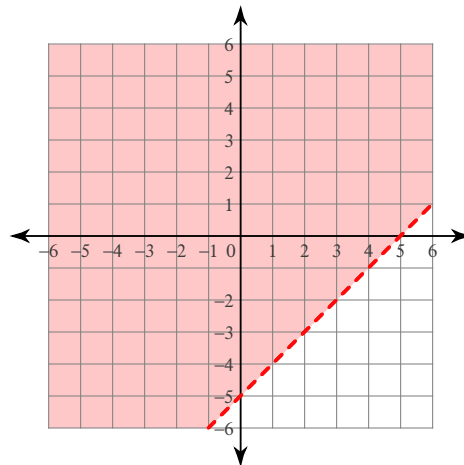
228) $x + 3y < -12$



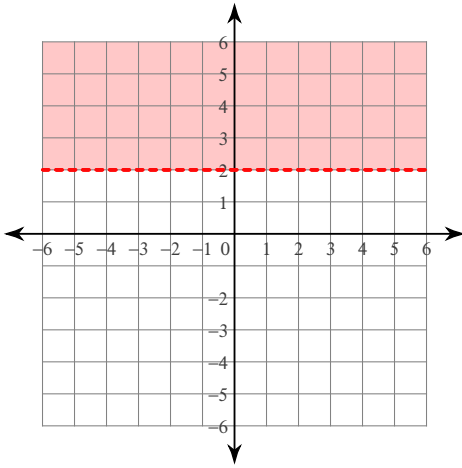
229) $x + y > 0$



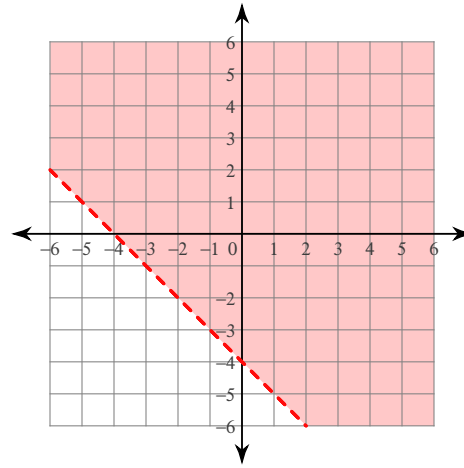
230) $x - y < 5$



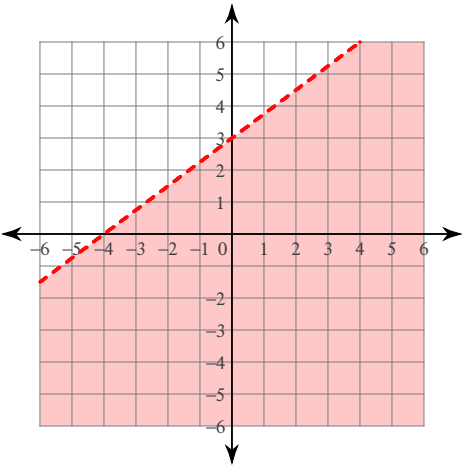
231) $y > 2$



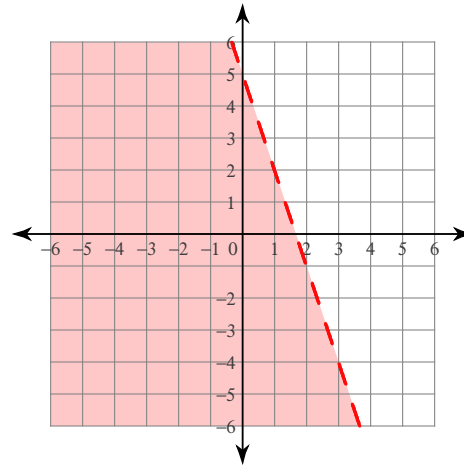
232) $x + y > -4$



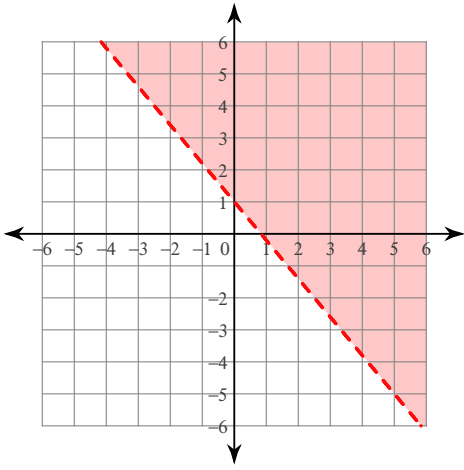
233) $3x - 4y > -12$



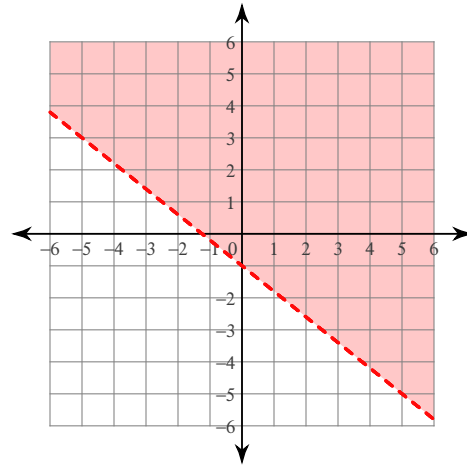
234) $3x + y < 5$



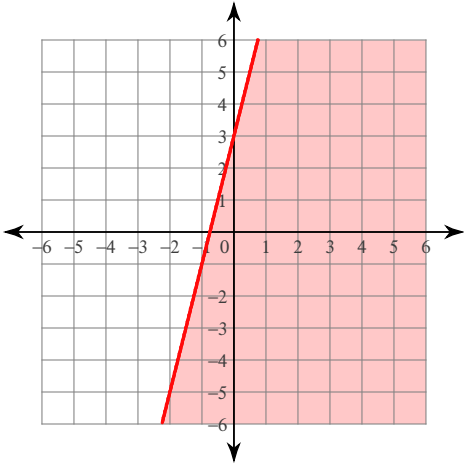
235) $6x + 5y > 5$



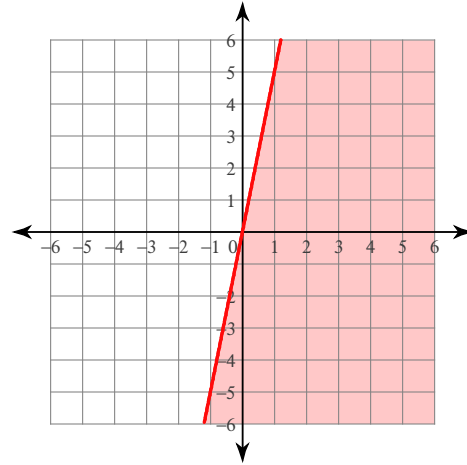
236) $4x + 5y > -5$



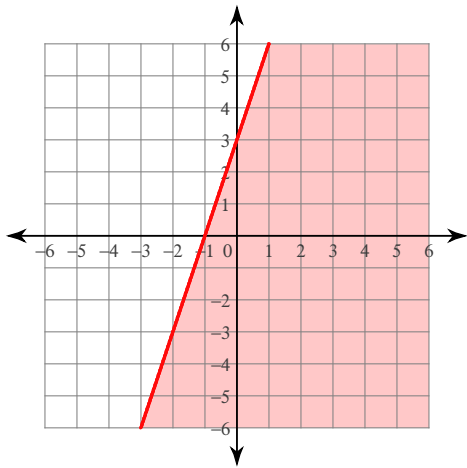
237) $4x - y \geq -3$



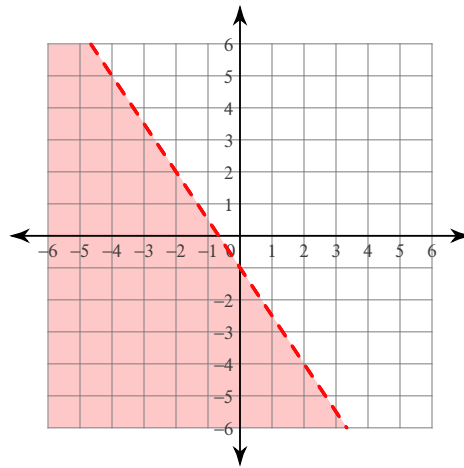
238) $5x - y \geq 0$



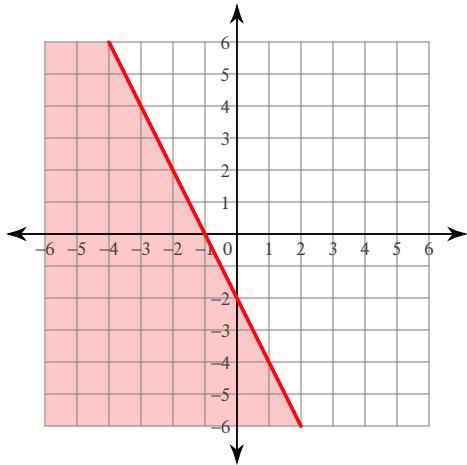
239) $3x - y \geq -3$



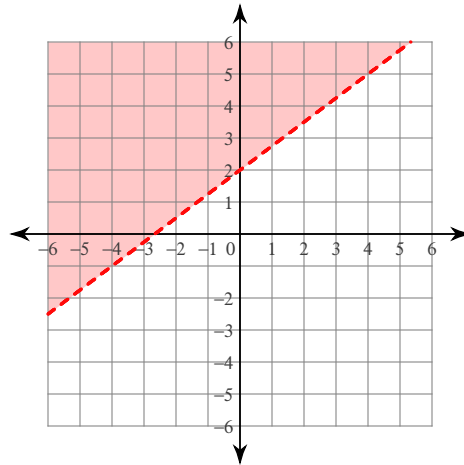
240) $3x + 2y < -2$



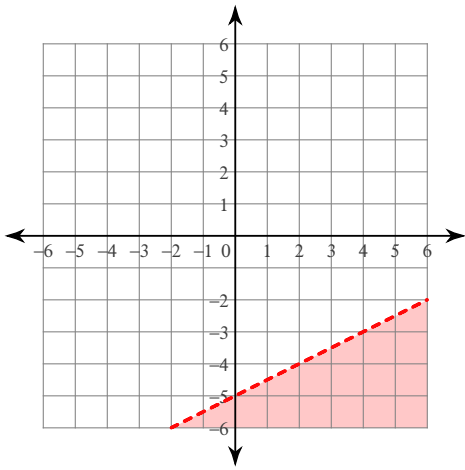
241) $2x + y \leq -2$



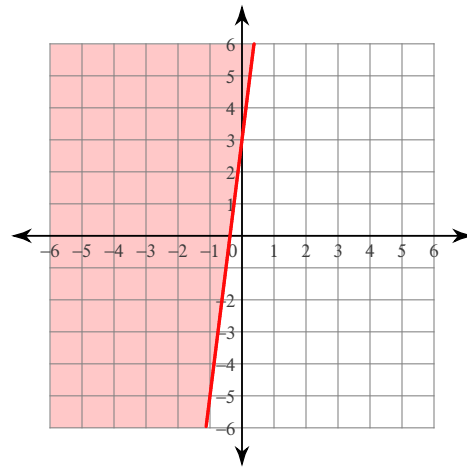
242) $3x - 4y < -8$



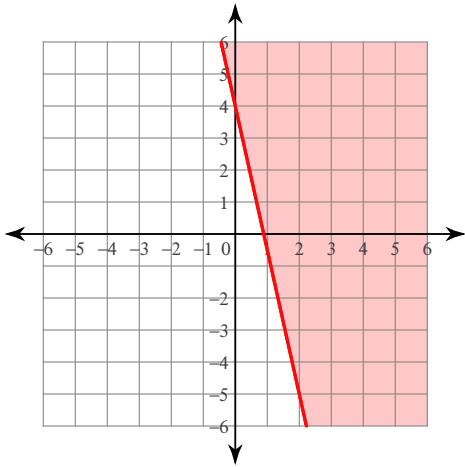
243) $x - 2y > 10$



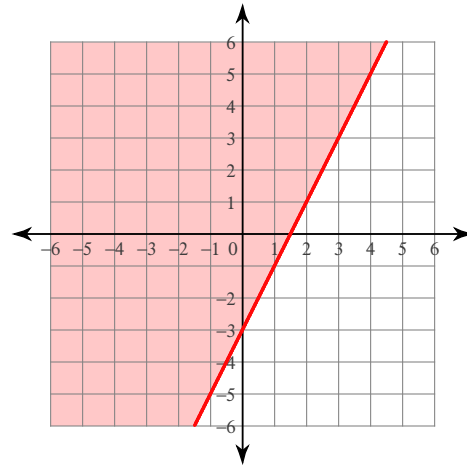
244) $8x - y \leq -3$



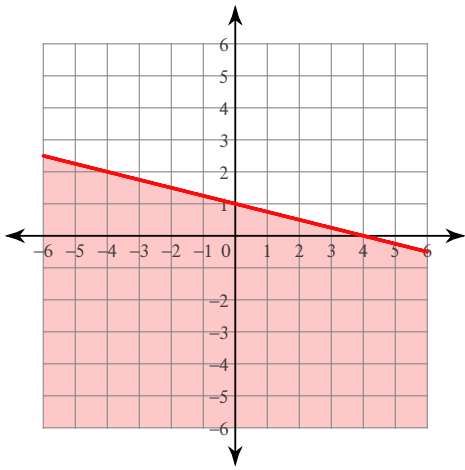
245) $9x + 2y \geq 8$



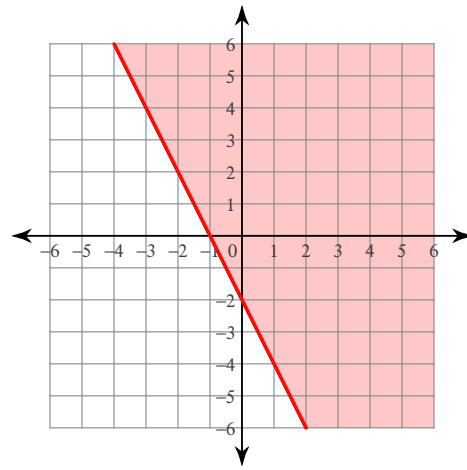
246) $2x - y \leq 3$



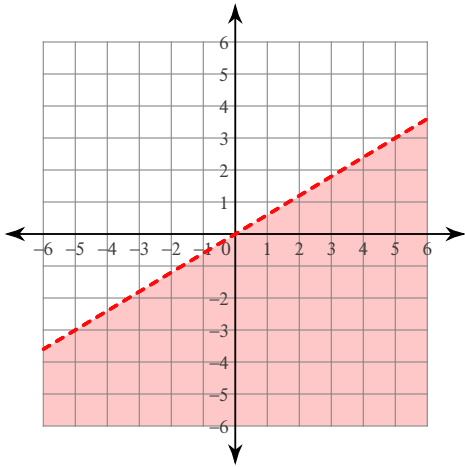
247) $x + 4y \leq 4$



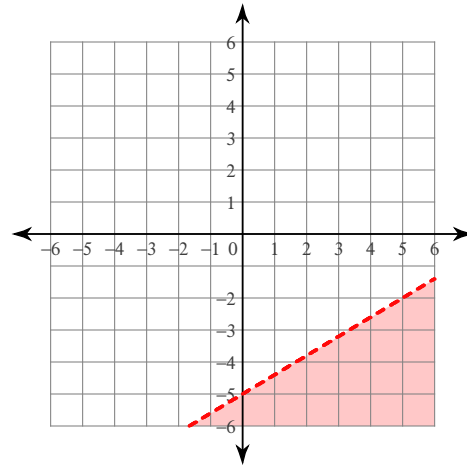
248) $2x + y \geq -2$



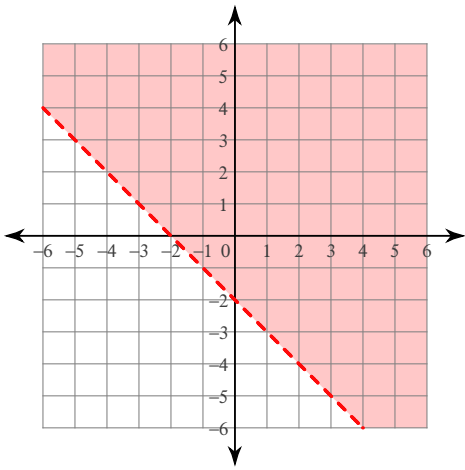
249) $3x - 5y > 0$



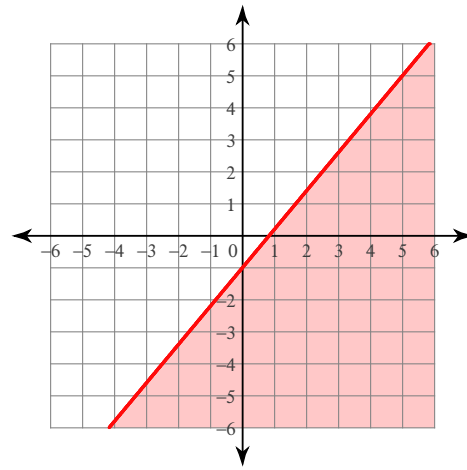
250) $3x - 5y > 25$



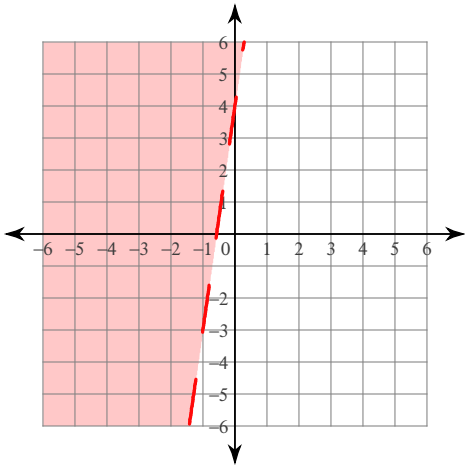
251) $x + y > -2$



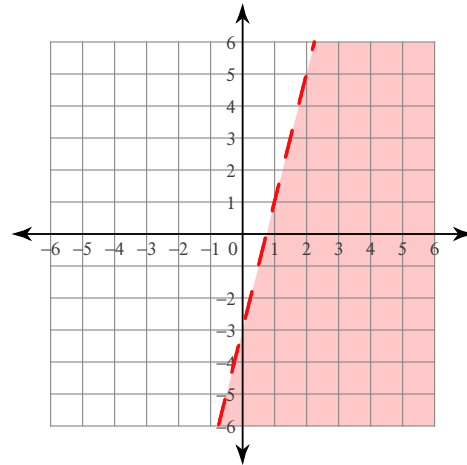
252) $6x - 5y \geq 5$



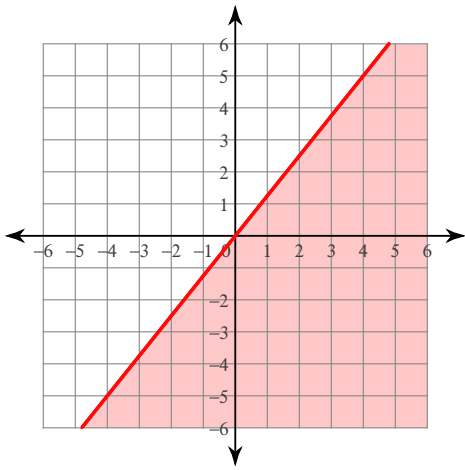
253) $7x - y < -4$



254) $4x - y > 3$



255) $5x - 4y \geq 0$



256) $4x - 3y \leq 3$

