

Linear Equations Review

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Find the slope of each line.

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

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

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

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

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

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

7) $x = 4$

8) $y = -\frac{8}{3}x - 4$

9) $y = -\frac{10}{3}x - 5$

10) $y = -4x - 4$

11) $y = x - 2$

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

13) $y = 2x + 3$

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

15) $y = -3$

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

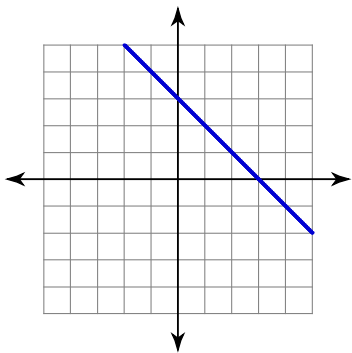
17) $y = \frac{1}{4}x - 5$

18) $y = -x + 3$

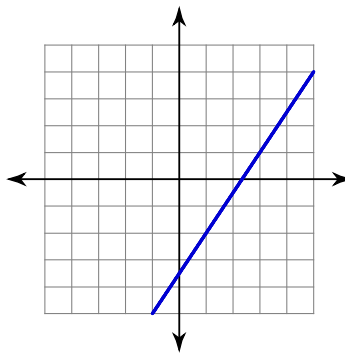
19) $x = 5$

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

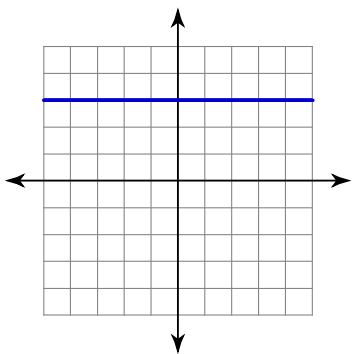
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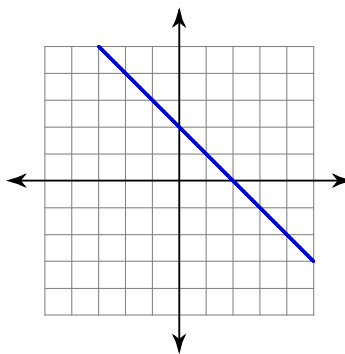
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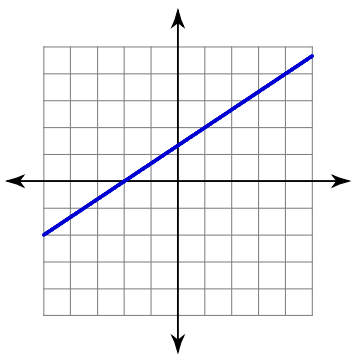
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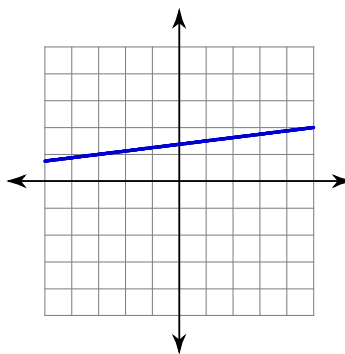
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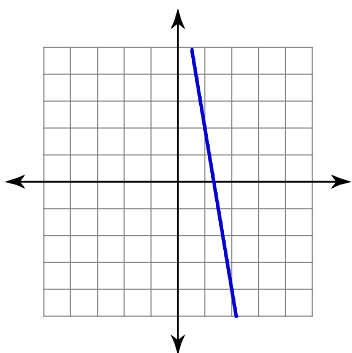
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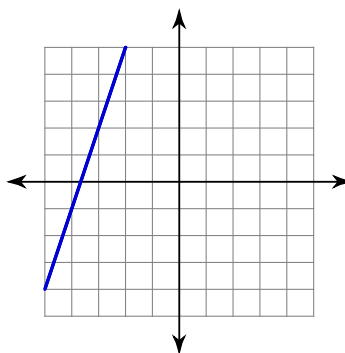
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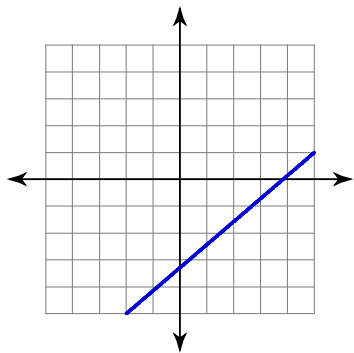
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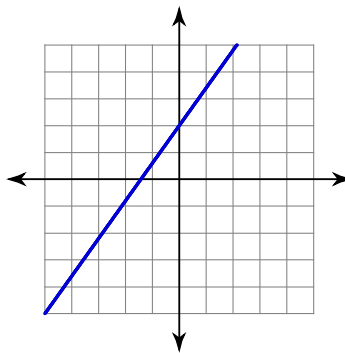
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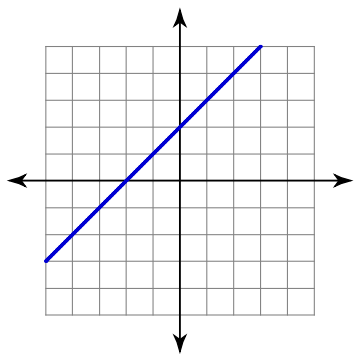
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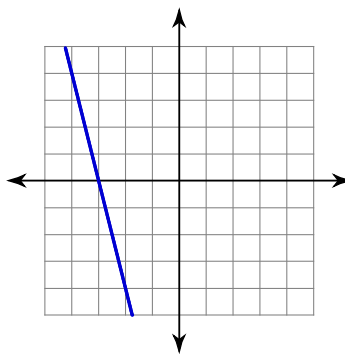
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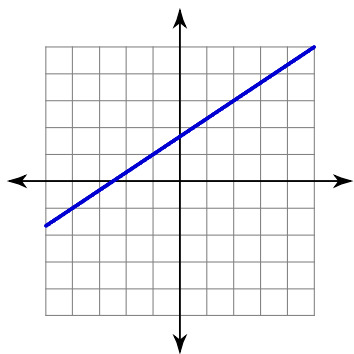
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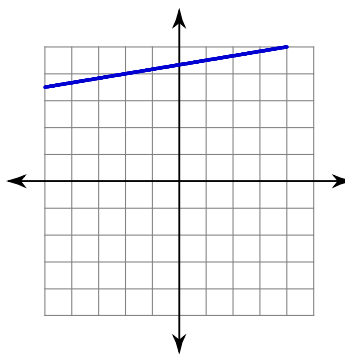
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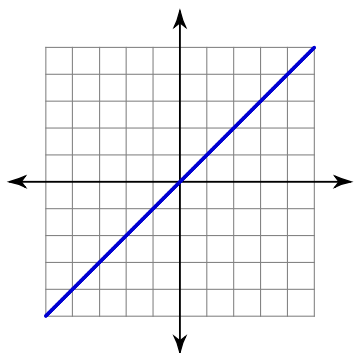
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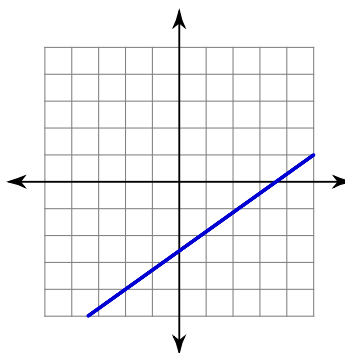
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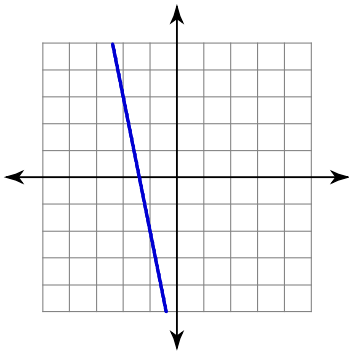
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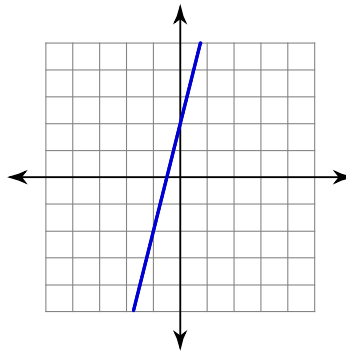
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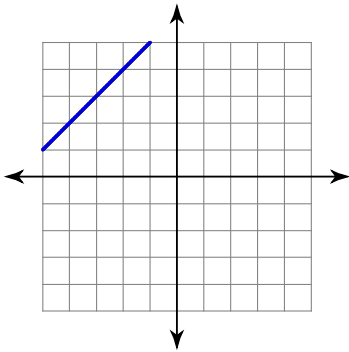
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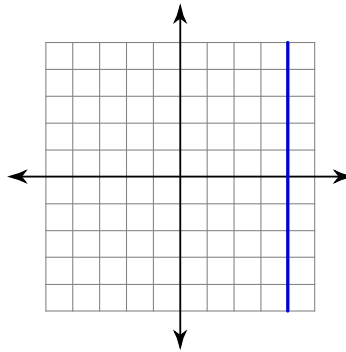
38)



39)



40)



Find the slope of a line perpendicular to each given line.

41) $0 = -4 + 5x - 4y$

42) $-16 = -6x - 8y$

43) $4 = 3x + 2y$

44) $-y + x = 0$

45) $-x - 5y = 0$

46) $1 - y = -x$

47) $2x = -12 + 3y$

48) $5 = -y$

49) $4y = -12 - 3x$

50) $3x + 8 + 2y = 0$

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

52) $-30 - 9x = -15y$

53) $15 = -5y - 4x$

54) $-y - 5 = 8x$

55) $-y = 5 - x$

56) $5 = -x - y$

57) $15 - 6x + 3y = 0$

58) $x - y = -3$

59) $x = -2y + 6$

60) $3y + 3 = 12x$

61) $9 = 3y + 6x$

62) $-7x - 2 = -y$

63) $0 = 5y + x - 15$

64) $-3y + 8x + 9 = 0$

65) $-4y + 7x = -12$

66) $3y + \frac{6}{5}x = -12$

67) $20 = 6x - 5y$

68) $3x = 2y - 2$

69) $20 = -x - 4y$

70) $2 + y = -x$

Find the value of x or y so that the line through the points has the given slope.

71) $(-5, -2)$ and $(1, y)$; slope: $\frac{5}{6}$

72) $(3, 3)$ and $(-3, y)$; slope: $\frac{2}{3}$

73) $(x, 1)$ and $(0, -3)$; slope: $\frac{4}{5}$

74) $(-5, -2)$ and $(-2, y)$; slope: $\frac{4}{3}$

75) $(2, -1)$ and $(x, 1)$; slope: $-\frac{1}{2}$

76) $(x, 0)$ and $(2, 2)$; slope: $\frac{2}{3}$

77) $(x, -4)$ and $(4, 3)$; slope: 7

78) $(x, 4)$ and $(-1, -1)$; slope: 5

79) $(x, -5)$ and $(3, -3)$; slope: -1

80) $(-3, -5)$ and $(x, 5)$; slope: 10

81) $(-4, y)$ and $(-2, 5)$; slope: 5

82) $(-4, -2)$ and $(x, -1)$; slope: $\frac{1}{9}$

83) $(-3, 4)$ and $(x, 3)$; slope: 1

84) $(0, 4)$ and $(x, 3)$; slope: $\frac{1}{4}$

85) $(1, -5)$ and $(x, -5)$; slope: 1

86) $(1, 5)$ and $(5, y)$; slope: $-\frac{5}{2}$

87) $(-2, 3)$ and $(-4, y)$; slope: $\frac{7}{2}$

88) $(2, y)$ and $(4, 0)$; slope: -1

89) $(5, -1)$ and $(x, 0)$; slope: $-\frac{1}{9}$

90) $(-2, -1)$ and $(x, 3)$; slope: -4

91) $(3, -3)$ and $(x, -1)$; slope: -1

92) $(x, -5)$ and $(-3, 0)$; slope: $-\frac{5}{7}$

93) $(-1, y)$ and $(-5, -4)$; slope: $\frac{1}{4}$

94) $(-2, y)$ and $(1, -5)$; slope: -1

95) $(5, -4)$ and $(x, 2)$; slope: -6

96) $(-2, y)$ and $(1, -4)$; slope: $-\frac{1}{3}$

97) $(1, 4)$ and $(-1, y)$; slope: 1

98) $(-2, y)$ and $(3, -2)$; slope: $-\frac{3}{5}$

99) $(2, 4)$ and $(x, 3)$; slope: $\frac{1}{6}$

100) $(3, y)$ and $(-5, 3)$; slope: -1

101) $(x, -18)$ and $(17, -8)$; slope: $\frac{5}{6}$

102) $(-1, y)$ and $(-14, -2)$; slope: -1

103) $(-12, y)$ and $(-18, -6)$; slope: 0

104) $(4, 6)$ and $(-12, y)$; slope: $-\frac{1}{2}$

105) $(-16, y)$ and $(-20, -1)$; slope: $\frac{17}{4}$

106) $(-15, -9)$ and $(x, 7)$; slope: -8

107) $(8, 5)$ and $(-1, y)$; slope: $\frac{20}{9}$

108) $(-5, y)$ and $(-15, 19)$; slope: $-\frac{7}{10}$

109) $(7, 17)$ and $(x, -17)$; slope: $\frac{17}{8}$

110) $(11, -2)$ and $(x, 19)$; slope: $-\frac{7}{6}$

111) $(19, -18)$ and $(x, -8)$; slope: undefined

112) $(x, -19)$ and $(-14, 15)$; slope: $-\frac{17}{6}$

113) $(x, -12)$ and $(1, -5)$; slope: $\frac{7}{10}$

114) $(x, -2)$ and $(-20, 12)$; slope: $-\frac{2}{3}$

115) $(-15, 0)$ and $(9, y)$; slope: $\frac{2}{3}$

116) $(-1, -8)$ and $(x, 2)$; slope: $\frac{10}{9}$

117) $(-11, -14)$ and $(-18, y)$; slope: $\frac{4}{7}$

118) $(9, 8)$ and $(5, y)$; slope: 6

119) $(x, 1)$ and $(-11, -20)$; slope: $-\frac{21}{5}$

120) $(9, -4)$ and $(1, y)$; slope: $-\frac{7}{8}$

121) $(-2, -3)$ and $(-3, y)$; slope: -3

122) $(-15, y)$ and $(9, -2)$; slope: $-\frac{1}{3}$

123) $(2, 9)$ and $(-14, y)$; slope: 0

124) $(x, -20)$ and $(-3, -6)$; slope: $-\frac{7}{9}$

125) $(-13, -9)$ and $(-19, y)$; slope: $-\frac{3}{2}$

126) $(x, 0)$ and $(2, 1)$; slope: $\frac{1}{7}$

127) $(-15, y)$ and $(-12, -12)$; slope: $\frac{2}{3}$

128) $(x, 8)$ and $(16, -8)$; slope: 4

129) $(15, y)$ and $(-9, 3)$; slope: $\frac{2}{3}$

130) $(-3, -20)$ and $(x, -1)$; slope: $-\frac{19}{5}$

131) $(0, 1)$ and $(x, -1)$; slope: -1

132) $(1\frac{2}{3}, y)$ and $(1\frac{1}{3}, \frac{1}{2})$; slope: -6

133) $(x, 2)$ and $(2\frac{1}{2}, -2\frac{1}{2})$; slope: $-\frac{9}{4}$

134) $(-1, \frac{2}{3})$ and $(x, -3\frac{1}{2})$; slope: $\frac{5}{2}$

135) $(\frac{1}{2}, 0)$ and $(x, -1\frac{2}{3})$; slope: $-\frac{5}{6}$

136) $\left(\frac{2}{3}, -1\right)$ and $(0, y)$; slope: 2

137) $(2, y)$ and $\left(2\frac{1}{3}, -\frac{5}{3}\right)$; slope: $-\frac{1}{2}$

138) $\left(-\frac{2}{3}, y\right)$ and $\left(-2, \frac{3}{2}\right)$; slope: $-\frac{5}{8}$

139) $\left(\frac{5}{3}, -3\frac{2}{3}\right)$ and $\left(\frac{1}{2}, y\right)$; slope: -1

140) $(2, y)$ and $\left(-\frac{2}{3}, 0\right)$; slope: $\frac{1}{4}$

141) $\left(-1, -1\frac{2}{3}\right)$ and $(x, 2)$; slope: $-\frac{11}{6}$

142) $(-2, y)$ and $\left(-\frac{4}{3}, -2\frac{1}{2}\right)$; slope: $-\frac{19}{4}$

143) $\left(-\frac{5}{3}, \frac{2}{3}\right)$ and $\left(-1\frac{1}{2}, y\right)$; slope: -10

144) $(-2, 0)$ and $(x, 1)$; slope: $\frac{3}{10}$

145) $\left(-\frac{4}{3}, 1\frac{1}{2}\right)$ and $\left(x, -\frac{1}{2}\right)$; slope: -1

146) $\left(\frac{2}{3}, -2\frac{2}{3}\right)$ and $(x, -1)$; slope: 2

147) $(x, 2)$ and $\left(-\frac{1}{2}, -1\frac{2}{3}\right)$; slope: $-\frac{22}{9}$

148) $\left(1\frac{1}{2}, 1\right)$ and $(x, -2)$; slope: -3

149) $(0, y)$ and $\left(\frac{1}{2}, -2\frac{1}{3}\right)$; slope: $\frac{1}{3}$

150) $(x, -1)$ and $\left(-2, -2\frac{1}{3}\right)$; slope: $\frac{2}{3}$

151) $\left(1\frac{1}{2}, y\right)$ and $\left(-\frac{3}{2}, \frac{1}{3}\right)$; slope: 0

152) $\left(x, -2\frac{1}{2}\right)$ and $(0, 3)$; slope: $-\frac{11}{6}$

153) $\left(\frac{4}{3}, 0\right)$ and $\left(x, \frac{1}{3}\right)$; slope: $-\frac{1}{6}$

154) $\left(-1\frac{1}{2}, 2\frac{1}{3}\right)$ and $(x, 1)$; slope: $-\frac{4}{3}$

155) $\left(2\frac{1}{2}, 1\frac{1}{2}\right)$ and $(1, y)$; slope: 0

156) $(2, y)$ and $(-1, 0)$; slope: $\frac{1}{3}$

157) $(-2, y)$ and $\left(2, -3\frac{1}{2}\right)$; slope: $-\frac{5}{4}$

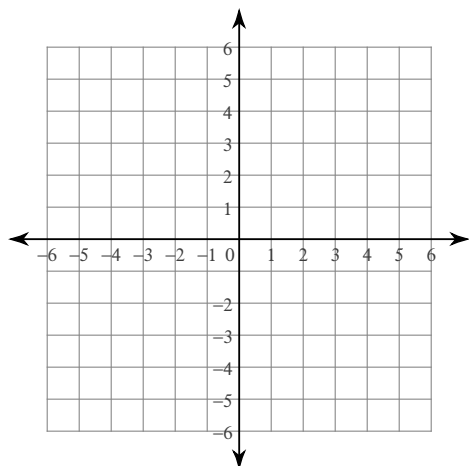
158) $\left(-2\frac{2}{3}, \frac{1}{3}\right)$ and $\left(-1\frac{1}{2}, y\right)$; slope: $-\frac{11}{7}$

159) $\left(\frac{1}{3}, 2\frac{1}{3}\right)$ and $\left(-\frac{1}{2}, y\right)$; slope: $\frac{6}{5}$

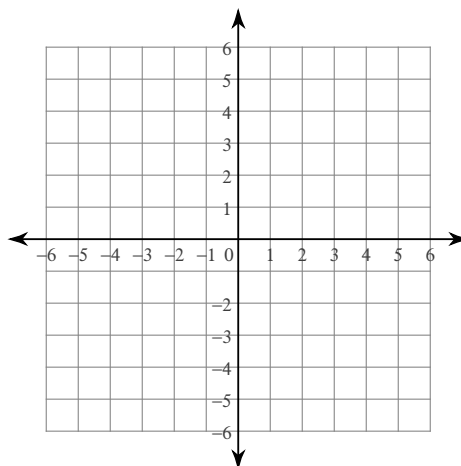
160) $\left(\frac{4}{3}, y\right)$ and $\left(1\frac{1}{2}, -1\frac{1}{2}\right)$; slope: -13

Sketch the graph of each line.

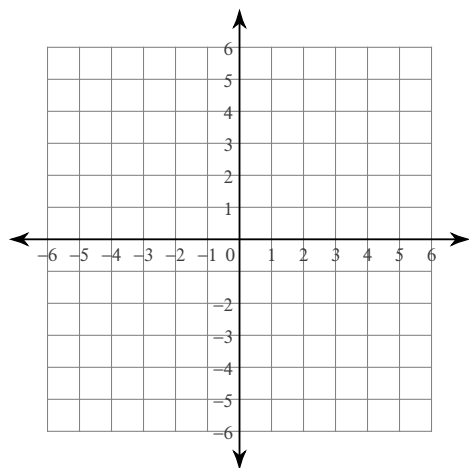
161) x-intercept = 1, y-intercept = -5



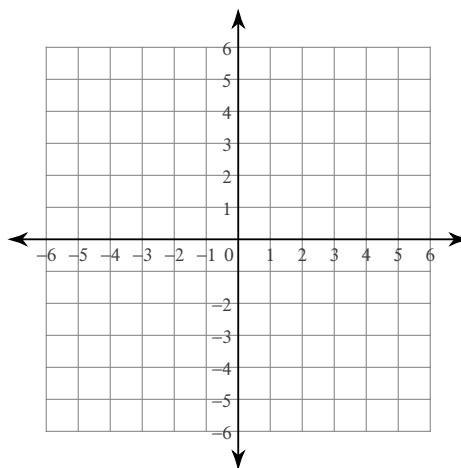
162) x-intercept = 2, y-intercept = -4



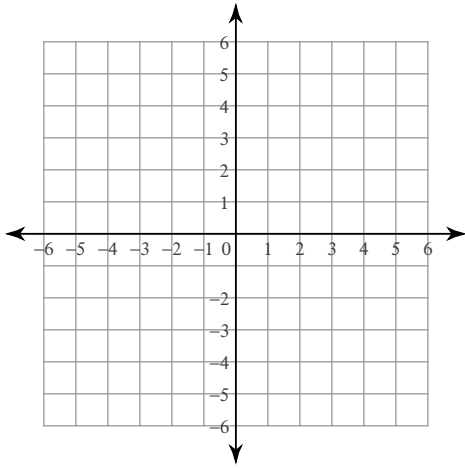
163) x-intercept = 2, y-intercept = 3



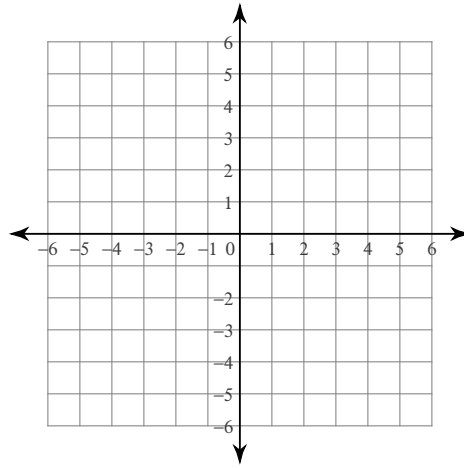
164) x-intercept = -1 , y-intercept = 4



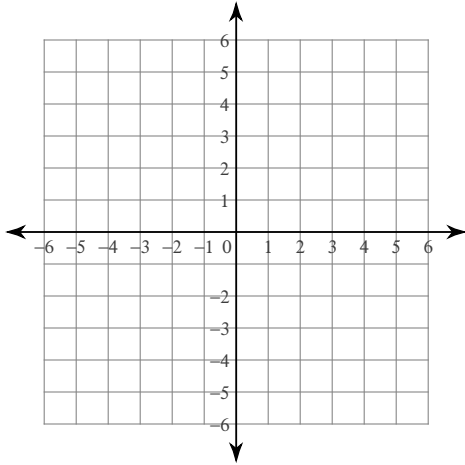
165) x-intercept = -4, y-intercept = -5



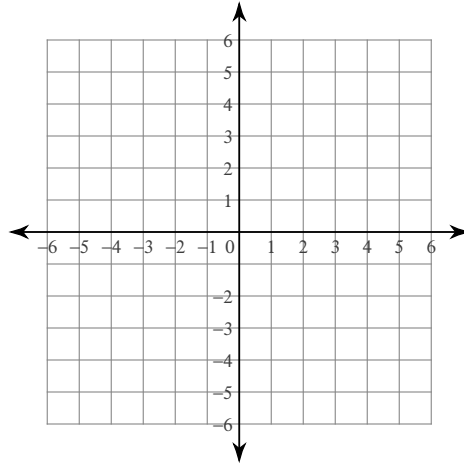
166) x-intercept = 5, y-intercept = 3



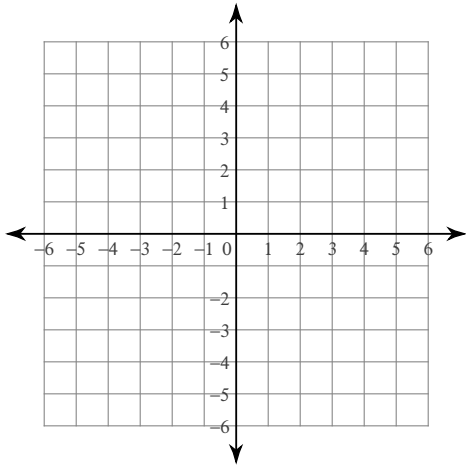
167) x-intercept = -3, y-intercept = 3



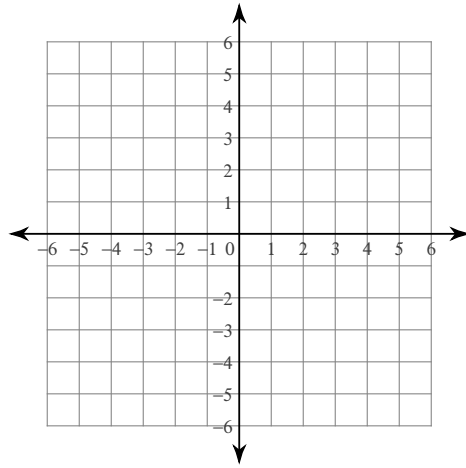
168) x-intercept = -5, y-intercept = 1



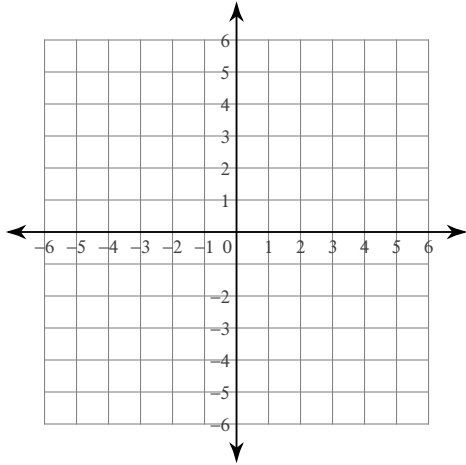
169) x-intercept = 4, y-intercept = -3



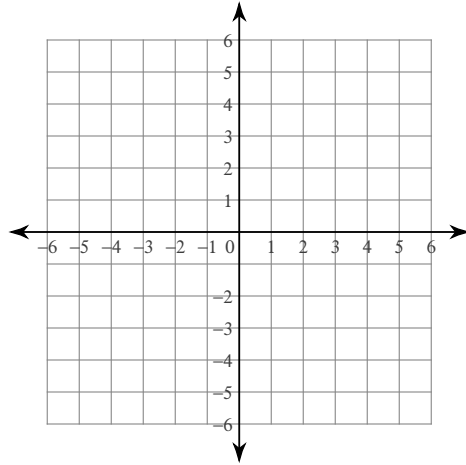
170) x-intercept = 2, y-intercept = -2



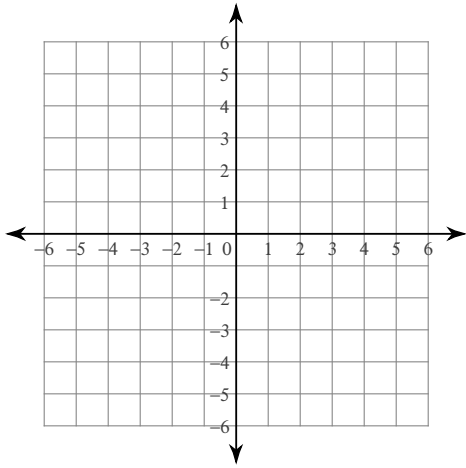
171) x-intercept = 2, y-intercept = 5



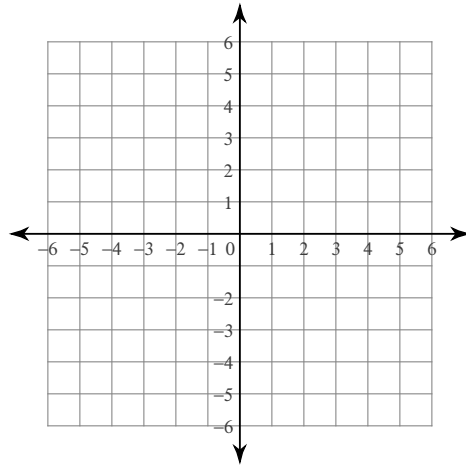
172) x-intercept = 3, y-intercept = -2



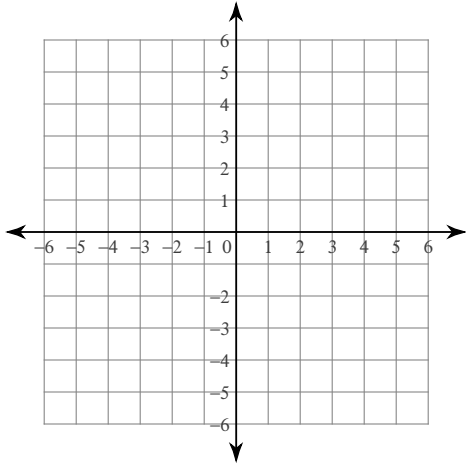
173) x-intercept = 4, y-intercept = -4



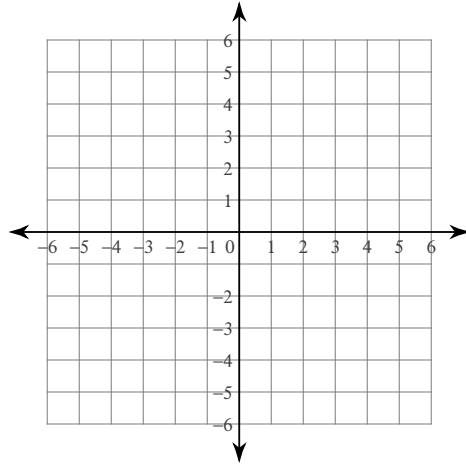
174) x-intercept = 4, y-intercept = 1



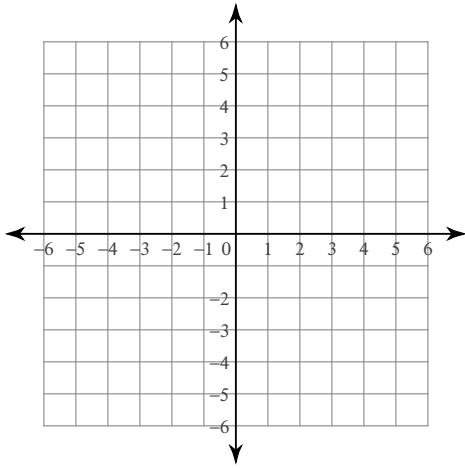
175) x-intercept = -4, y-intercept = 3



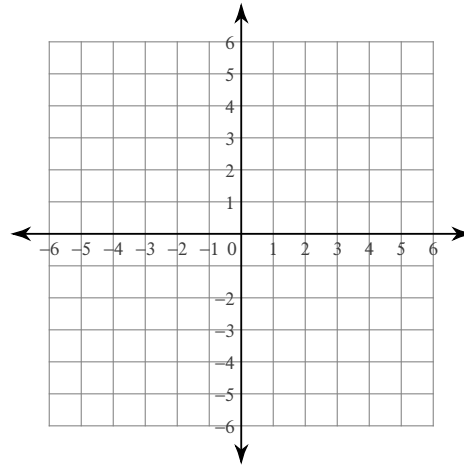
176) x-intercept = -5, y-intercept = 4



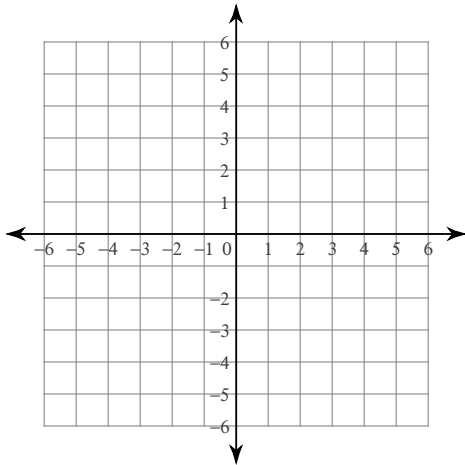
177) x-intercept = -5 , y-intercept = -2



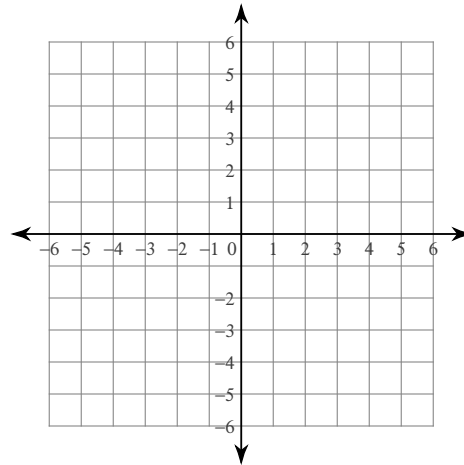
178) x-intercept = 5 , y-intercept = -2



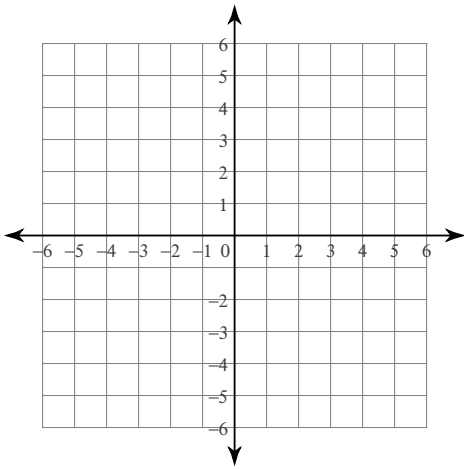
179) x-intercept = -3 , y-intercept = 1



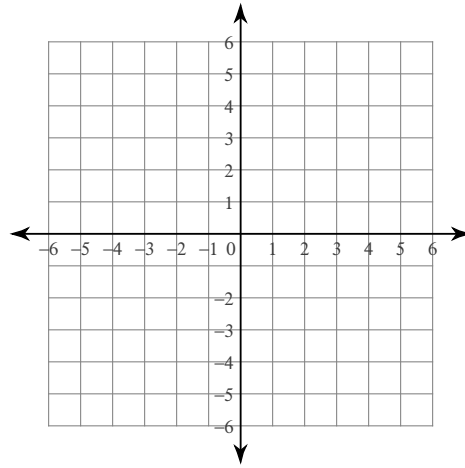
180) x-intercept = -2 , y-intercept = 3



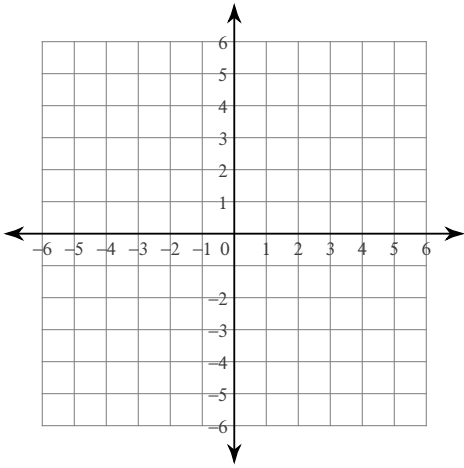
181) $y = \frac{1}{4}x$



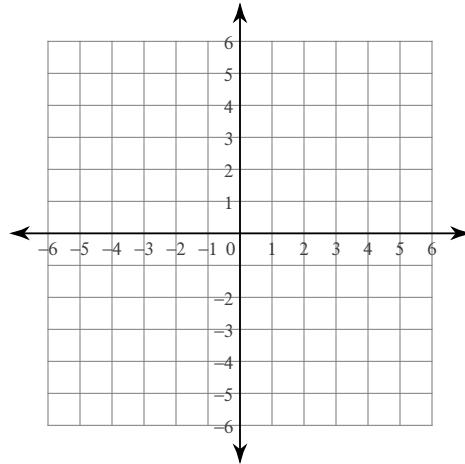
182) $y = x - 2$



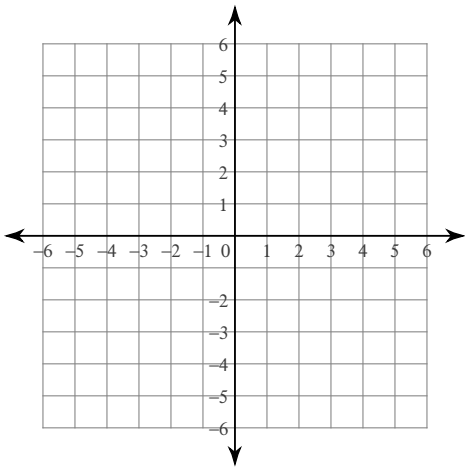
183) $y = 2x + 5$



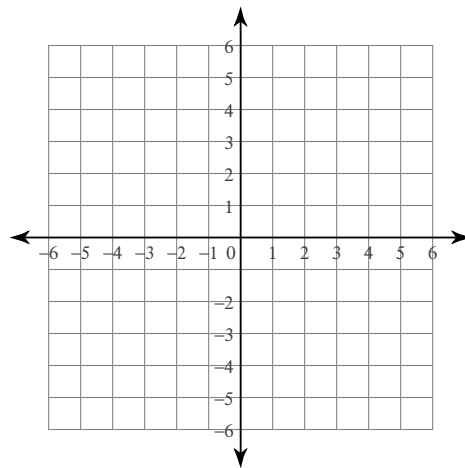
184) $y = -\frac{4}{5}x - 5$



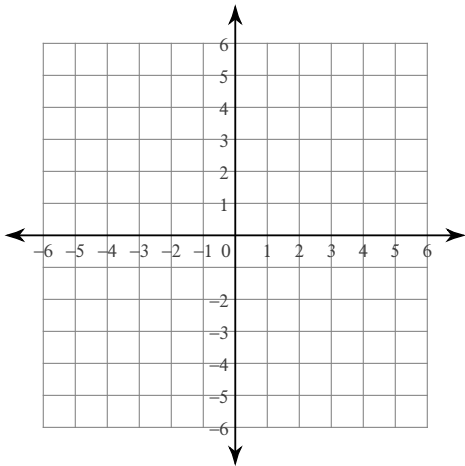
185) $y = -x - 4$



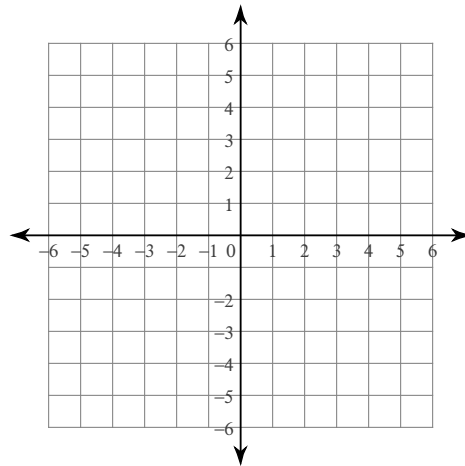
186) $y = \frac{1}{3}x + 2$



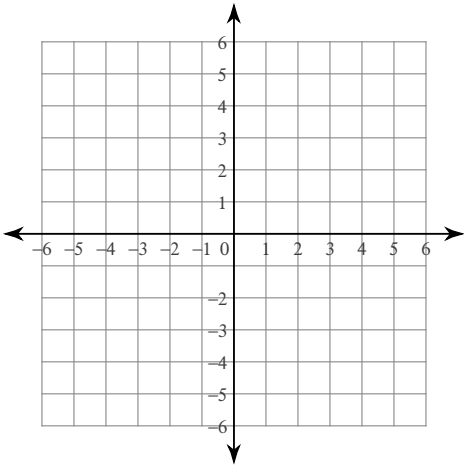
187) $y = \frac{1}{2}x + 5$



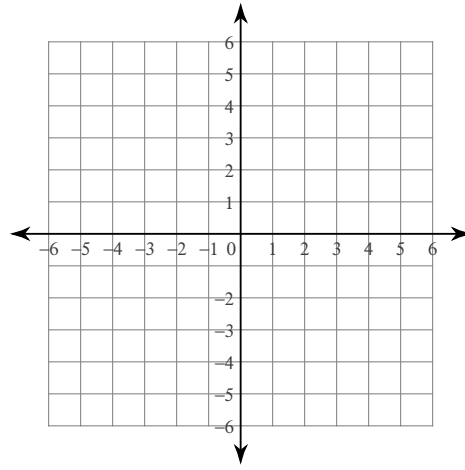
188) $y = \frac{6}{5}x + 3$



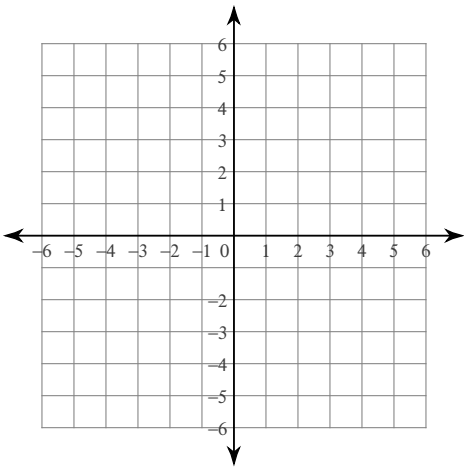
189) $y = -x + 1$



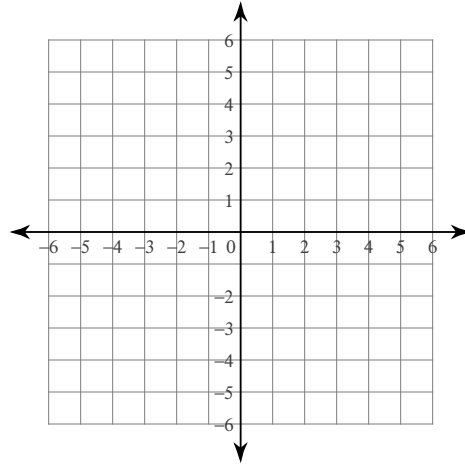
190) $x = 1$



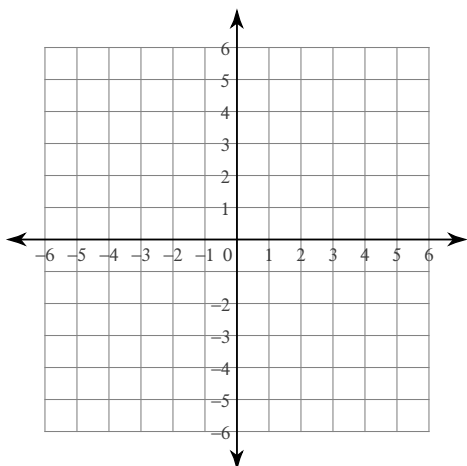
191) $y = -\frac{4}{5}x + 1$



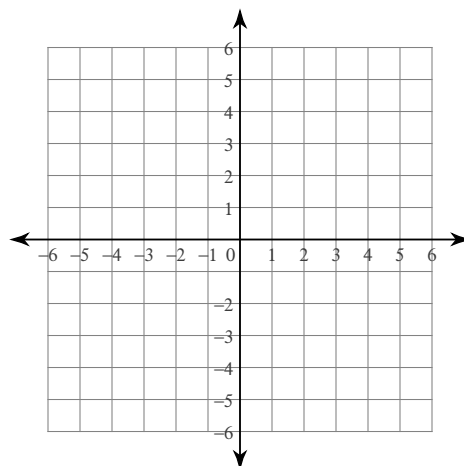
192) $y = 2x - 3$



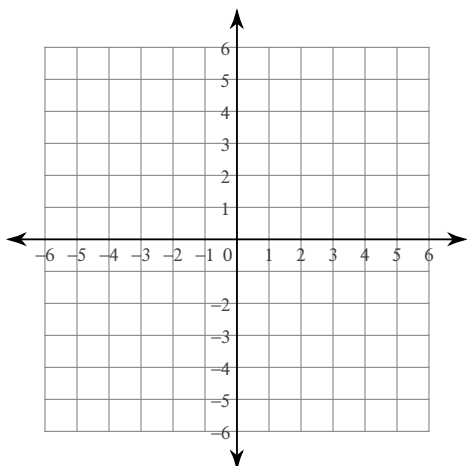
193) $y = -\frac{1}{3}x + 5$



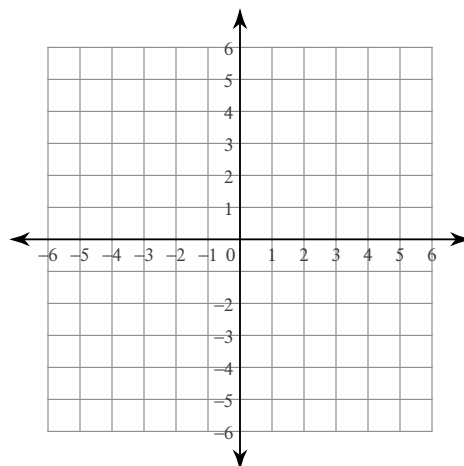
194) $y = -\frac{2}{3}x + 1$



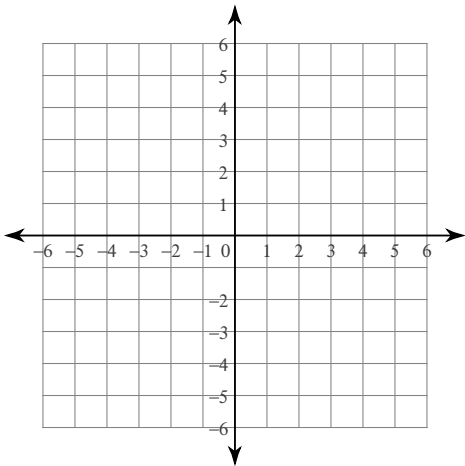
195) $y = -\frac{2}{3}x - 1$



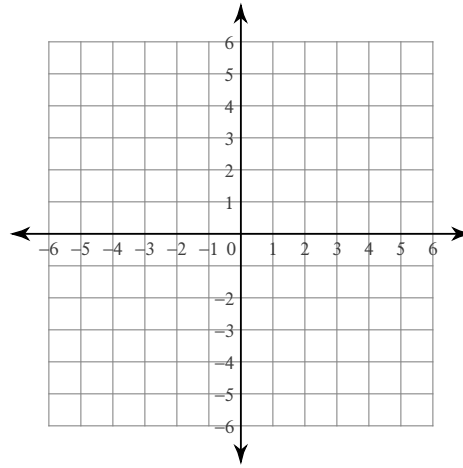
196) $y = -\frac{1}{2}x + 4$



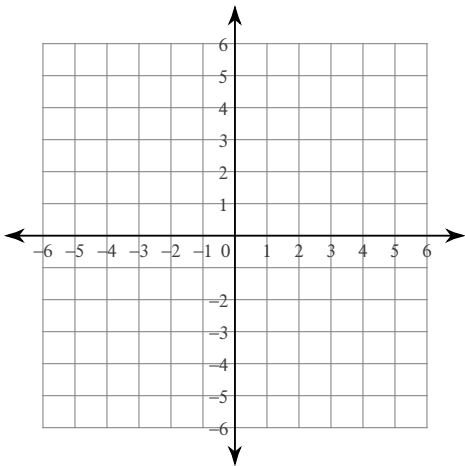
197) $y = -\frac{2}{3}x + 2$



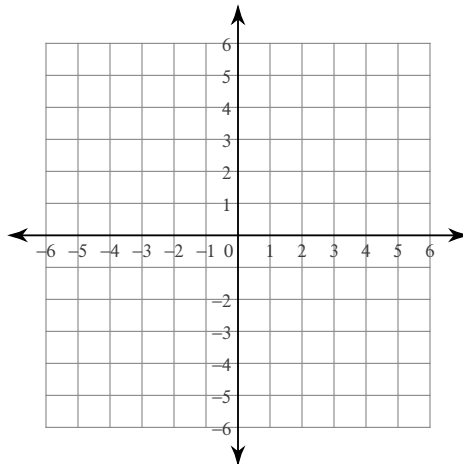
198) $y = 1$



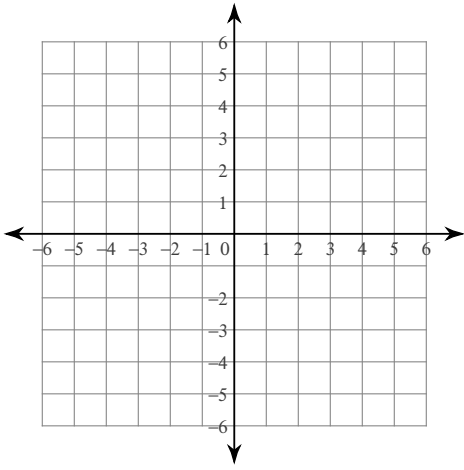
199) $y = -x + 4$



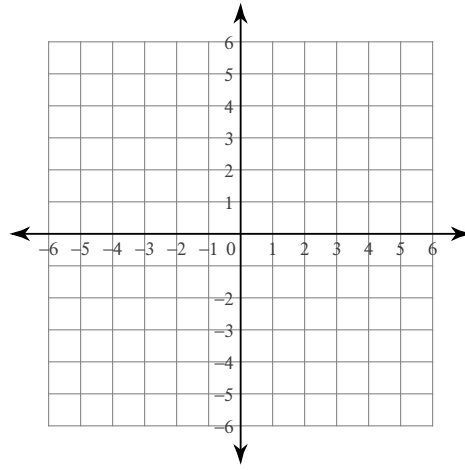
200) $y = -\frac{6}{5}x - 4$



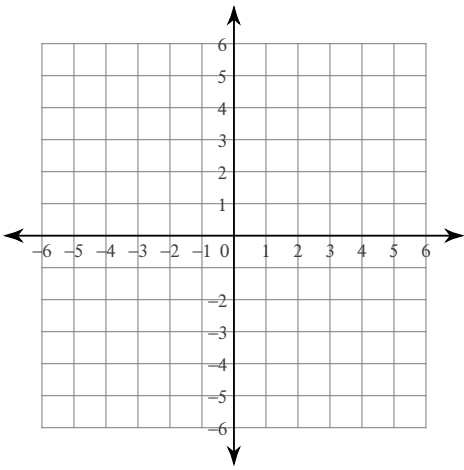
201) $y = -x$



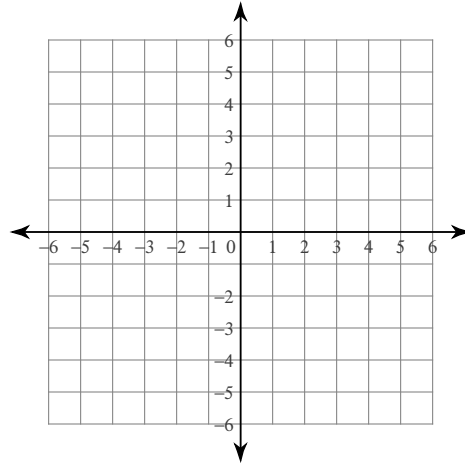
202) $y = x - 5$



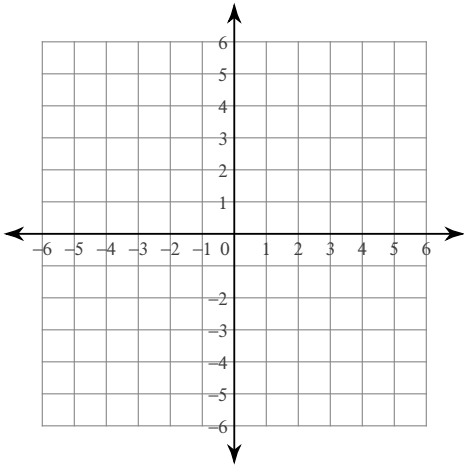
203) $y = -\frac{4}{5}x - 1$



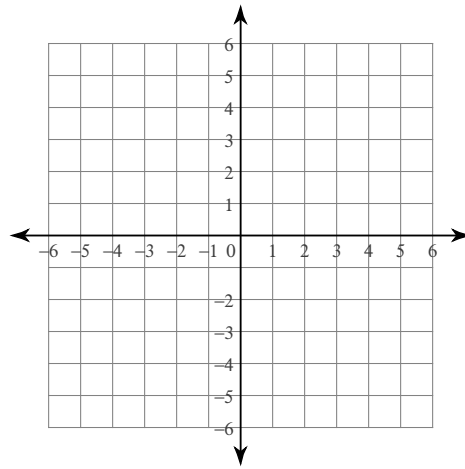
204) $y = 4x + 5$



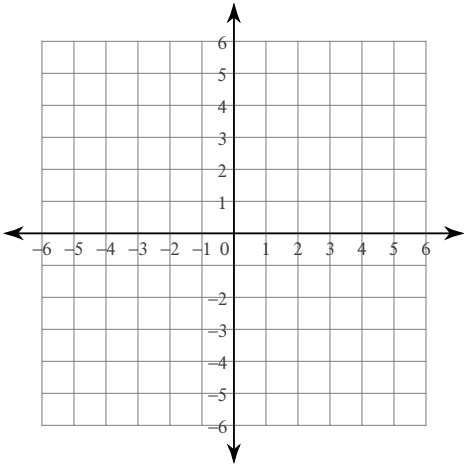
205) $y = x - 1$



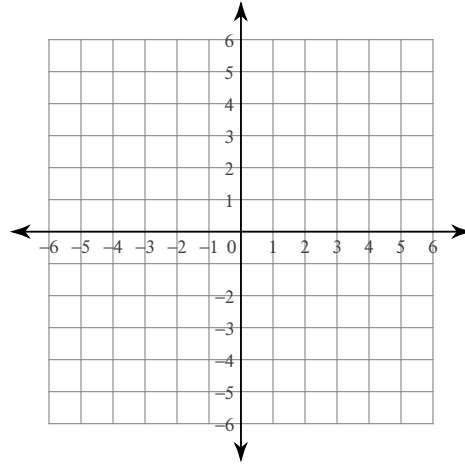
206) $y = \frac{7}{3}x - 4$



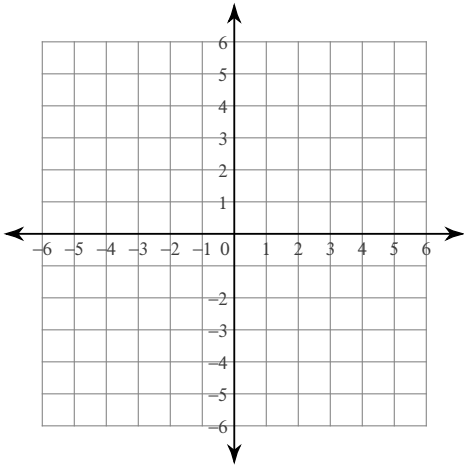
207) $y = -\frac{9}{4}x - 5$



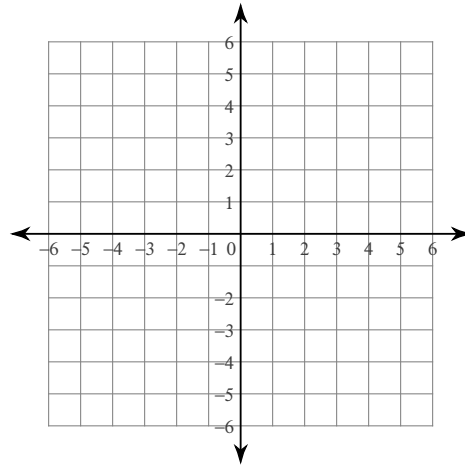
208) $y = x$



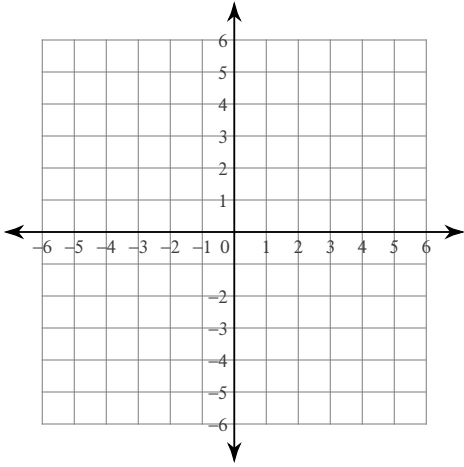
209) $y = x + 2$



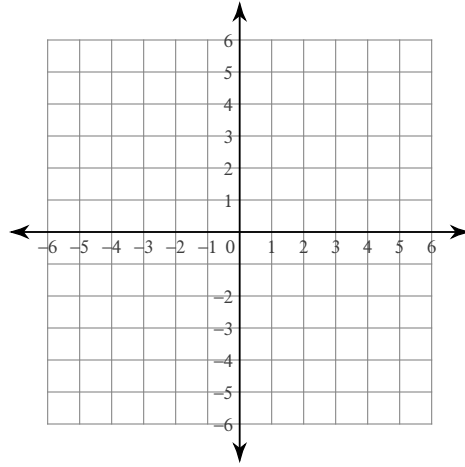
210) $x = 5$



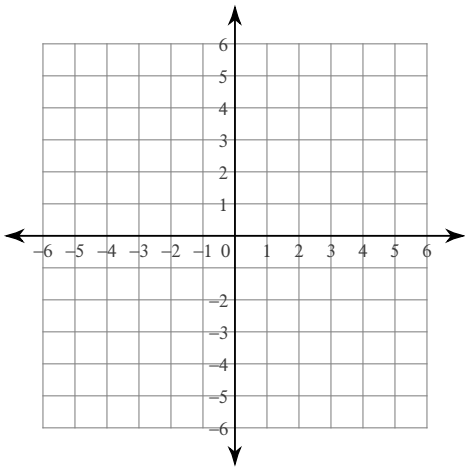
211) $6 = x + 3y$



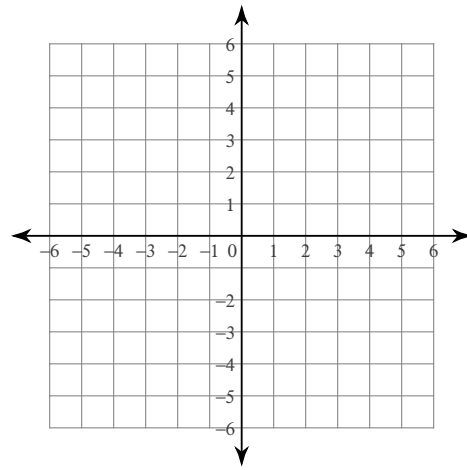
212) $-4y + 3x = -20$



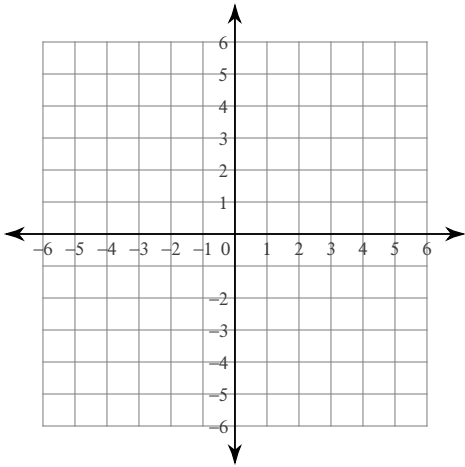
213) $-2y + x = 4$



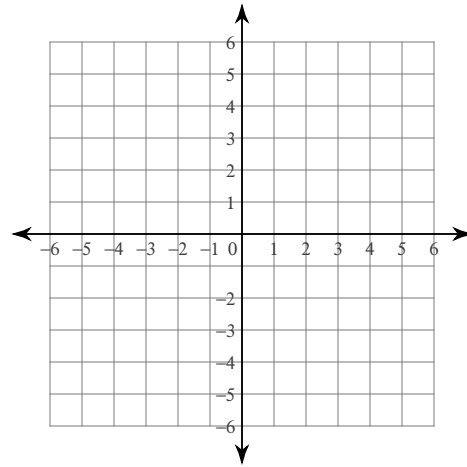
214) $-5y - 20 = -3x$



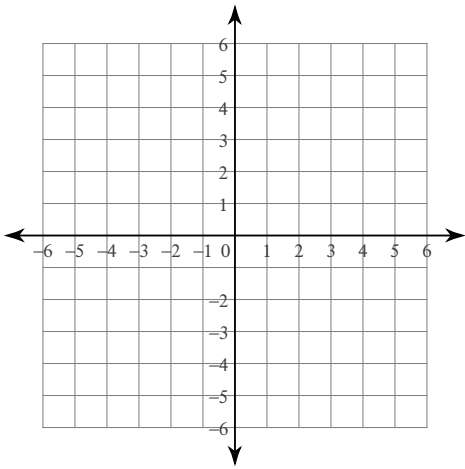
215) $y + 1 - x = 0$



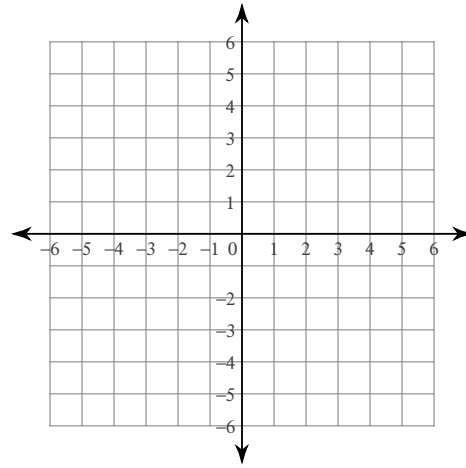
216) $-3 = 3x - y$



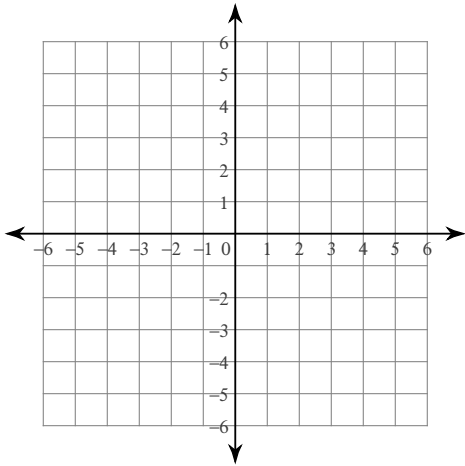
$$217) -1 - \frac{7}{15}x = \frac{1}{5}y$$



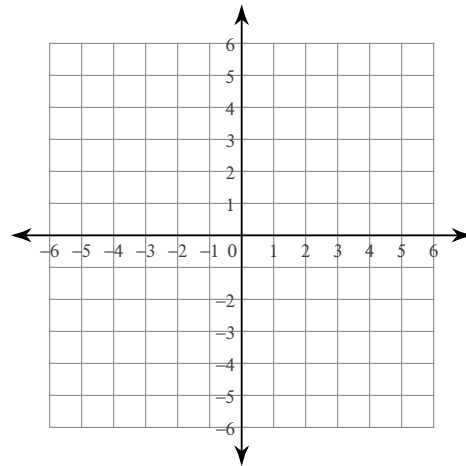
$$218) -2x - 2 = 0$$



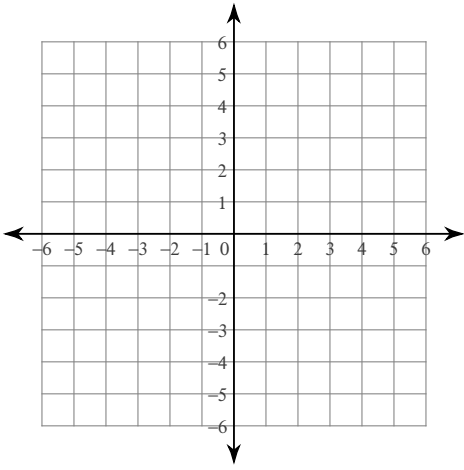
$$219) 6y - 30 = 3x$$



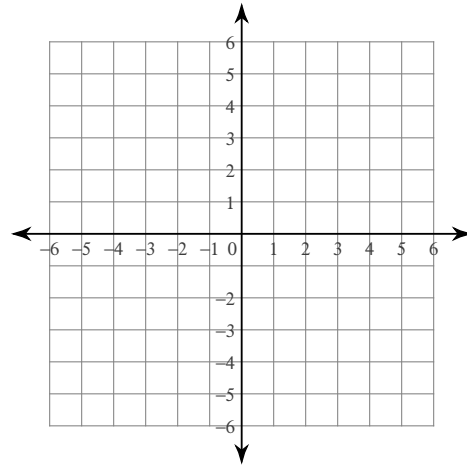
$$220) -1 - \frac{1}{12}x = -\frac{1}{3}y$$



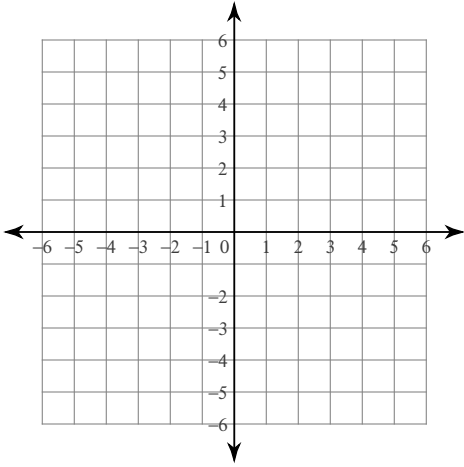
221) $y = -x + 2$



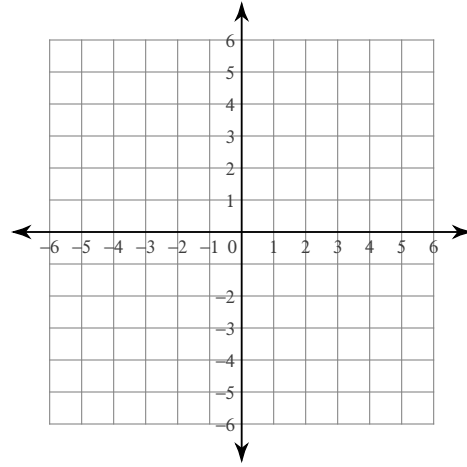
222) $-y = -3 - 4x$



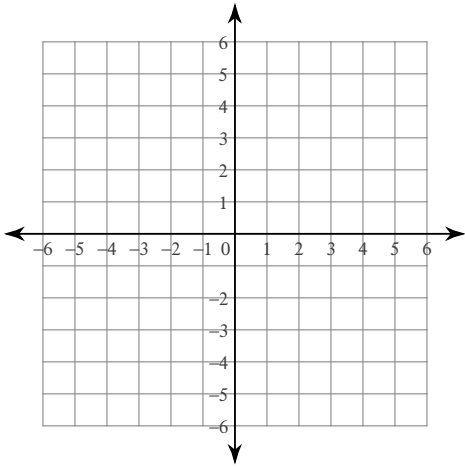
223) $0 = -2x$



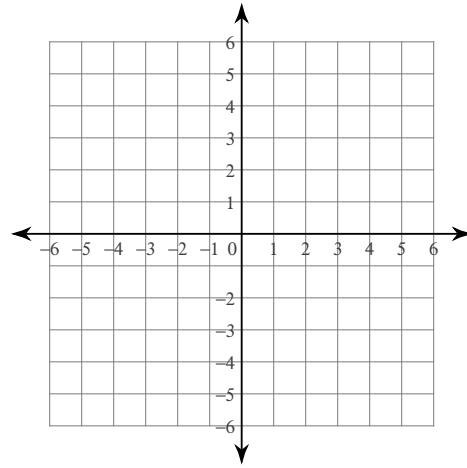
224) $-3x + 5y + 25 = 0$



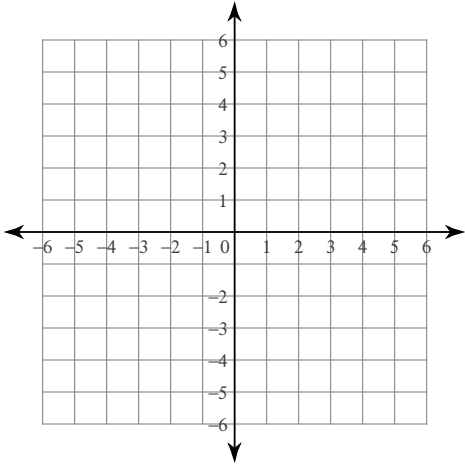
225) $-3 - y = x$



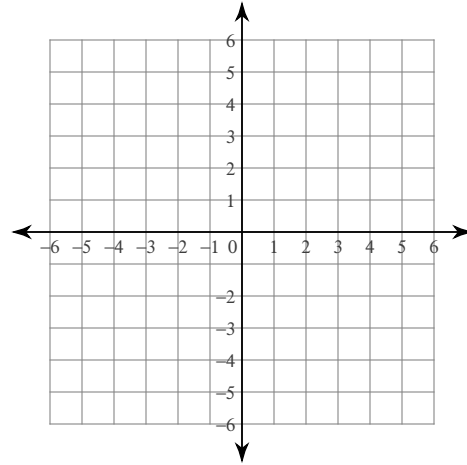
226) $-2x = -4y + 8$



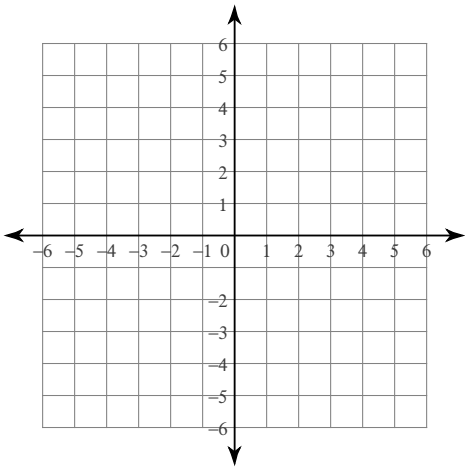
227) $-4x - 3 - 3y = 0$



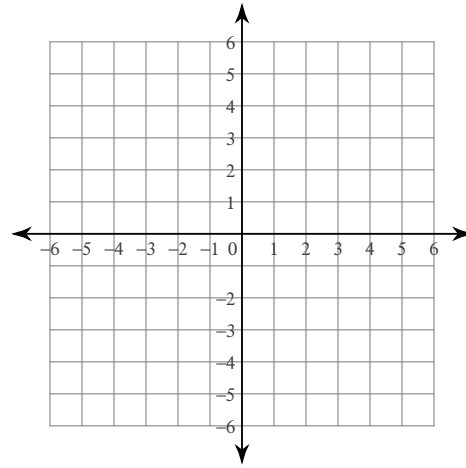
228) $y + x - 1 = 0$



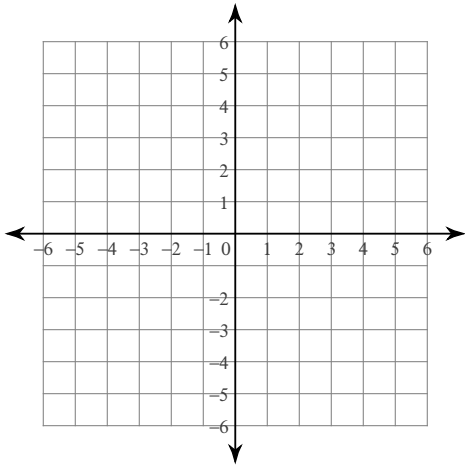
$$229) -1 - \frac{7}{20}x = -\frac{1}{4}y$$



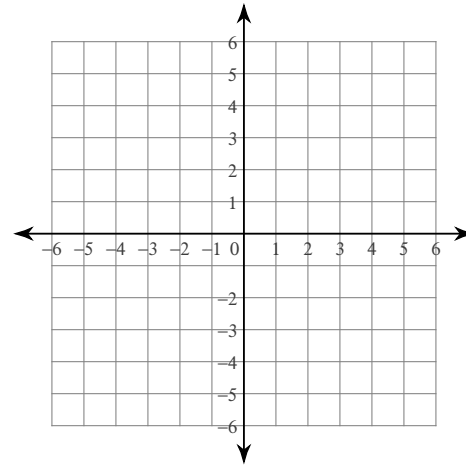
$$230) -y + x = 0$$



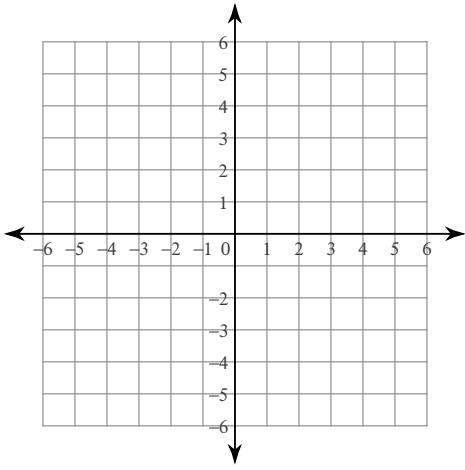
$$231) 3 + 8x = y$$



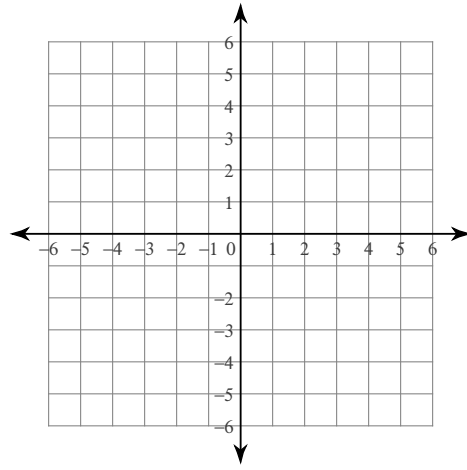
$$232) -1 + y = 0$$



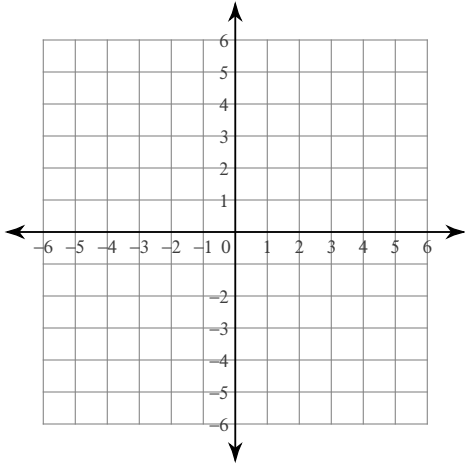
233) $y - 4 = -4x$



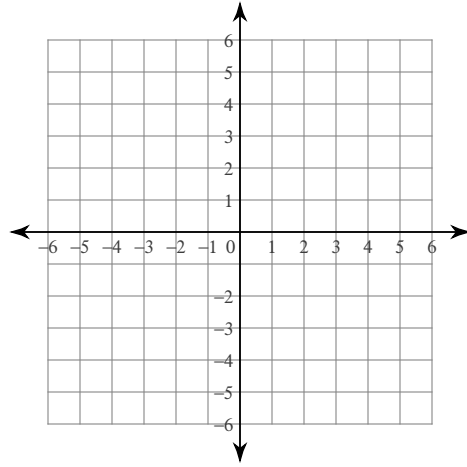
234) $3 - y = 8x$



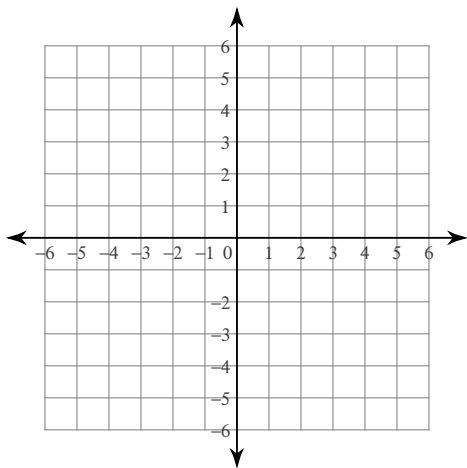
235) $3y - 4x = 0$



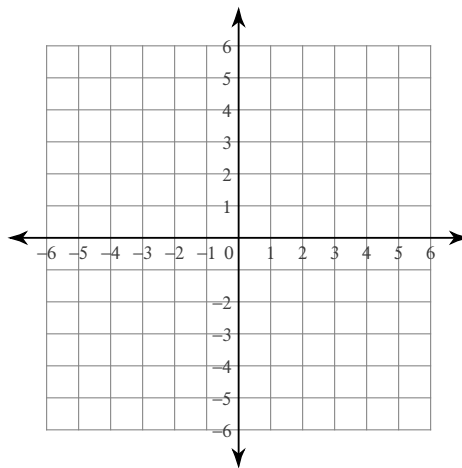
236) $4x + 25 = -5y$



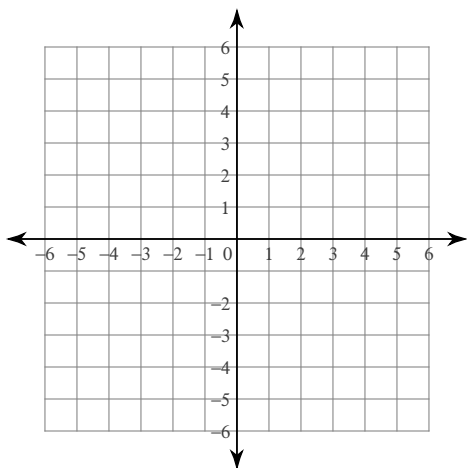
237) $-9 + 3y = 6x$



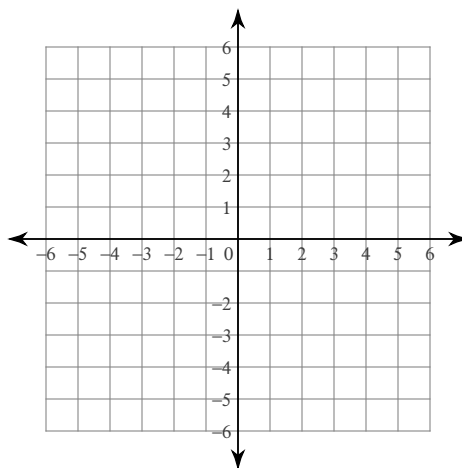
238) $2 - 3x = y$



239) $8 + 5x = -2y$



240) $-10x = -4y$



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

241) Slope = 0, y-intercept = -4

242) Slope = 5, y-intercept = -5

243) Slope = $-\frac{1}{2}$, y-intercept = -4

244) Slope = 2, y-intercept = -5

245) Slope = 3, y-intercept = -4

247) Slope = -3, y-intercept = -3

249) Slope = 0, y-intercept = 2

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

253) Slope = -1, y-intercept = 3

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

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

259) Slope = -2, y-intercept = 4

261) Slope = -2, y-intercept = -4

263) Slope = -2, y-intercept = 1

265) Slope = 1, y-intercept = -1

267) Slope = $\frac{7}{4}$, y-intercept = 5

269) Slope = 3, y-intercept = 2

246) Slope = 5, y-intercept = 2

248) Slope = 1, y-intercept = -4

250) Slope = $-\frac{1}{5}$, y-intercept = -2

252) Slope = $\frac{4}{3}$, y-intercept = 1

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

256) Slope = $\frac{7}{2}$, y-intercept = 5

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

260) Slope = $-\frac{9}{5}$, y-intercept = -5

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

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

266) Slope = $\frac{1}{2}$, y-intercept = 4

268) Slope = -1, y-intercept = 0

270) Slope = 4, y-intercept = 5

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

271) through: $(-1, -4)$, slope = $\frac{1}{3}$

272) through: $(3, 4)$, slope = $\frac{1}{3}$

273) through: $(5, -5)$, slope = $-\frac{4}{5}$

274) through: $(-3, 1)$, slope = -2

275) through: $(1, 0)$, slope = 1

276) through: $(-5, 0)$, slope = -1

277) through: $(-2, 0)$, slope = $-\frac{4}{7}$

278) through: $(-2, -5)$, slope = 3

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

280) through: $(3, 0)$, slope = $\frac{5}{3}$

281) through: $(-3, 2)$, slope = -2

282) through: $(-1, -4)$, slope = $-\frac{1}{4}$

283) through: $(-5, 0)$, slope = $\frac{3}{5}$

284) through: $(2, 0)$, slope = -1

285) through: $(4, 1)$, slope = $\frac{3}{2}$

286) through: $(1, -2)$, slope = 2

287) through: $(0, -3)$, slope = $\frac{7}{5}$

288) through: $(3, -4)$, slope = $-\frac{8}{3}$

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

290) through: $(-1, -3)$, slope = undefined

291) through: $(5, -1)$, slope = undefined

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

293) through: $(1, 1)$, slope = 3

294) through: $(-2, -1)$, slope = $\frac{1}{2}$

295) through: $(-1, 4)$, slope = -9

296) through: $(1, -3)$, slope = 0

297) through: $(-1, -4)$, slope = 1

298) through: $(-5, -3)$, slope = $\frac{6}{5}$

299) through: $(3, -5)$, slope = -2

300) through: $(3, -3)$, slope = $-\frac{7}{3}$

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

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

302) through: $(4, 4)$, perp. to $y = -\frac{4}{9}x + 5$

303) through: $(-1, -4)$, perp. to $y = 5$

304) through: $(-4, 5)$, perp. to $y = \frac{1}{2}x - 5$

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

306) through: $(-2, 3)$, perp. to $y = 2x - 4$

307) through: $(-4, -4)$, perp. to $x = 0$

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

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

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

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

312) through: $(4, 1)$, perp. to $y = -\frac{2}{3}x - 5$

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

314) through: $(-5, 1)$, perp. to $y = x + 3$

315) through: $(3, -2)$, perp. to $y = 2x - 5$

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

317) through: $(2, -5)$, perp. to $x = 0$

318) through: $(-3, 0)$, perp. to $y = -3x - 4$

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

320) through: $(-3, -1)$, perp. to $y = \frac{7}{4}x - 5$

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

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

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

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

325) through: $(3, -2)$, perp. to $y = \frac{3}{7}x + 2$

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

327) through: $(-3, 4)$, perp. to $y = x - 3$

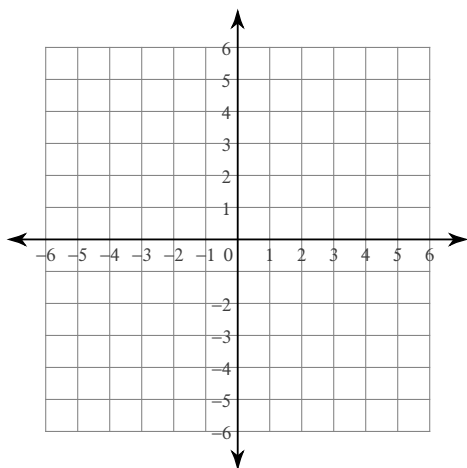
328) through: $(2, -1)$, perp. to $y = \frac{2}{3}x - 2$

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

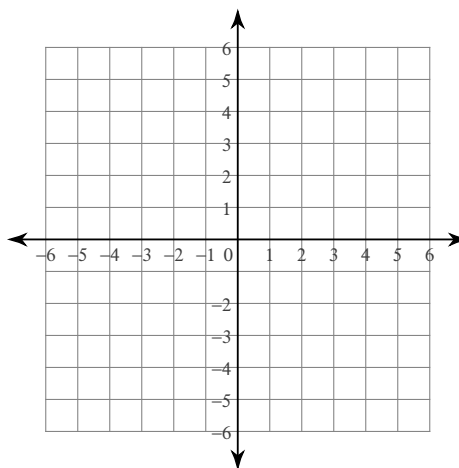
330) through: $(3, 5)$, perp. to $y = -3x + 1$

Graph each equation.

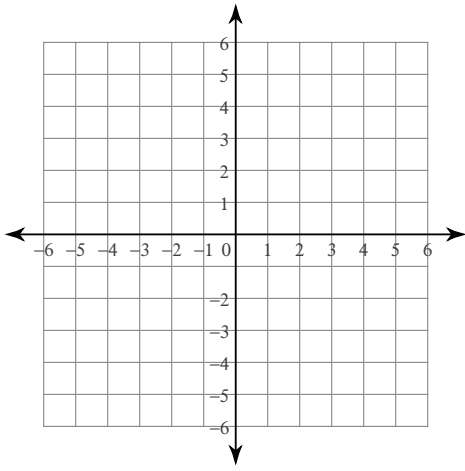
331) $y = |x| + 3$



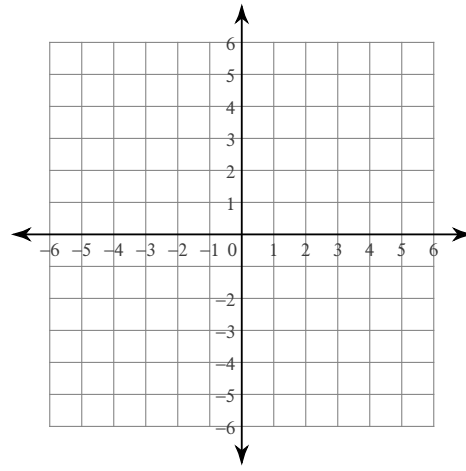
332) $y = |x| - 1$



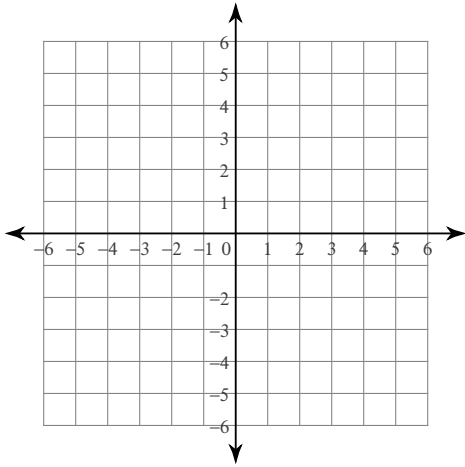
$$333) y = |x + 4|$$



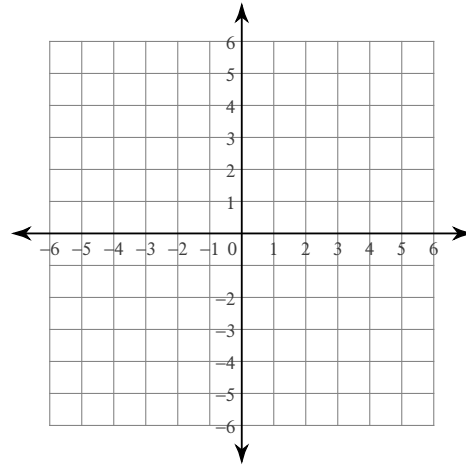
$$334) y = |x + 3|$$



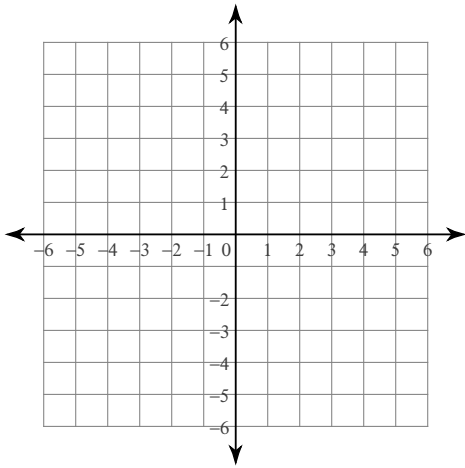
$$335) y = |x + 1|$$



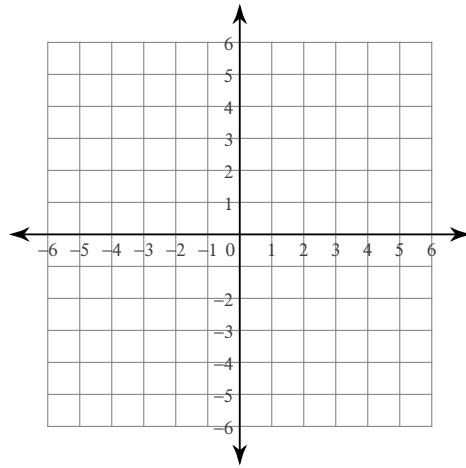
$$336) y = |x| + 2$$



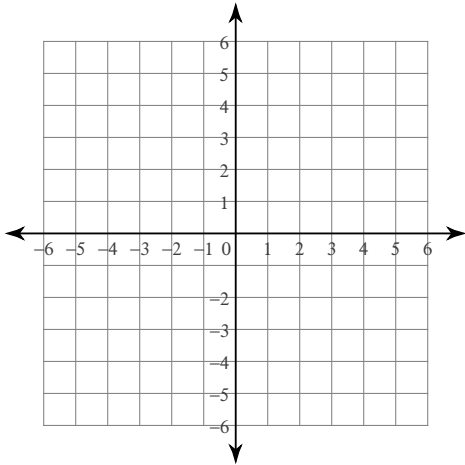
$$337) y = |x - 4|$$



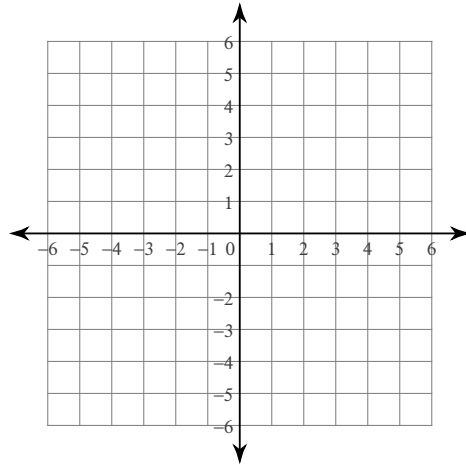
$$338) y = |x - 1|$$



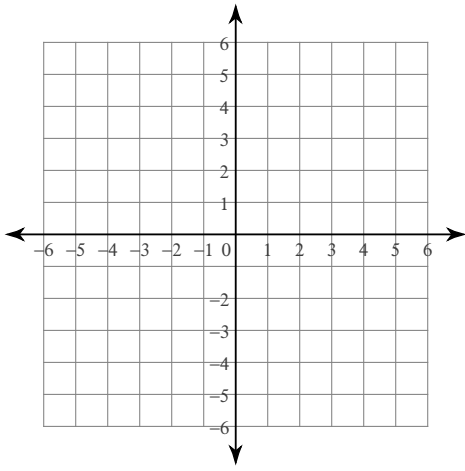
$$339) y = |x| + 1$$



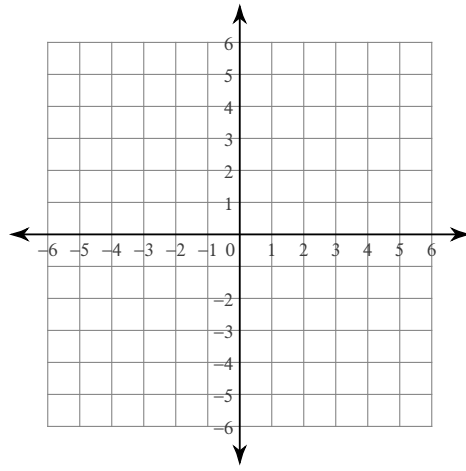
$$340) y = |x| - 2$$



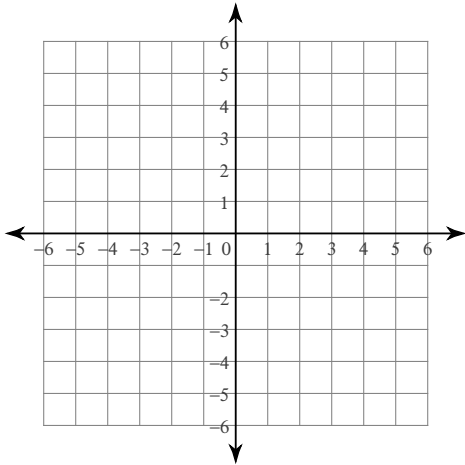
$$341) y = |x - 3|$$



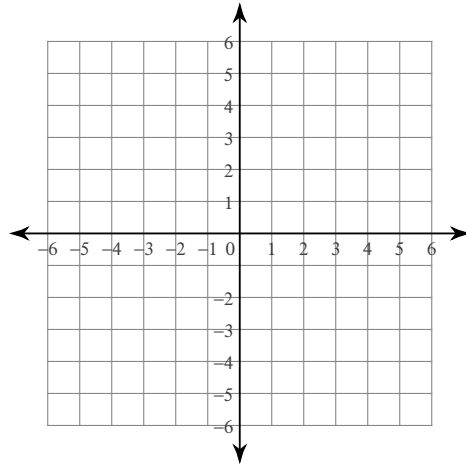
$$342) y = |x| - 3$$



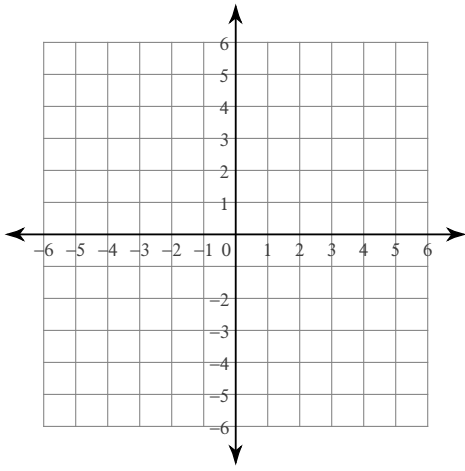
$$343) y = |x| + 4$$



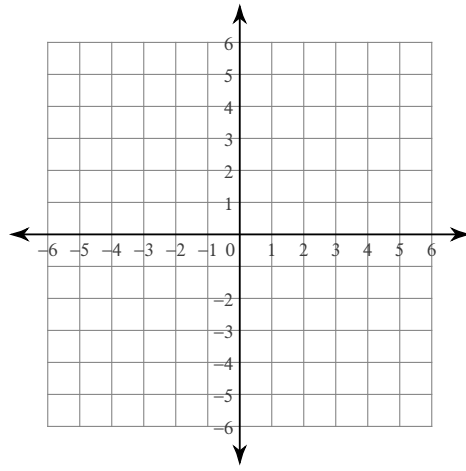
$$344) y = |x - 2|$$



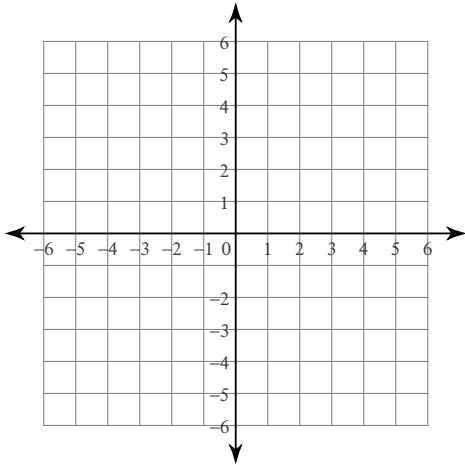
$$345) y = |x| - 4$$



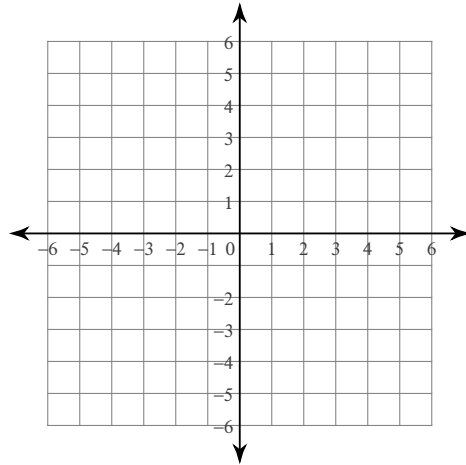
$$346) y = |x + 2|$$



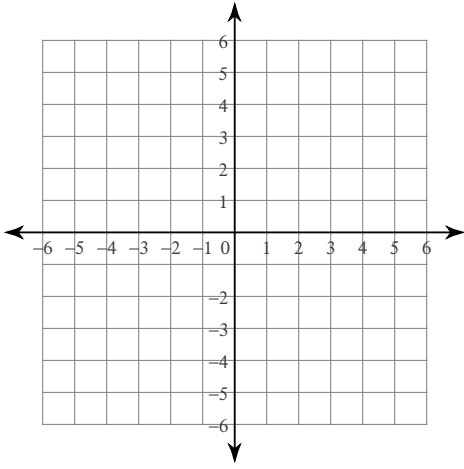
$$347) y = |x + 2|$$



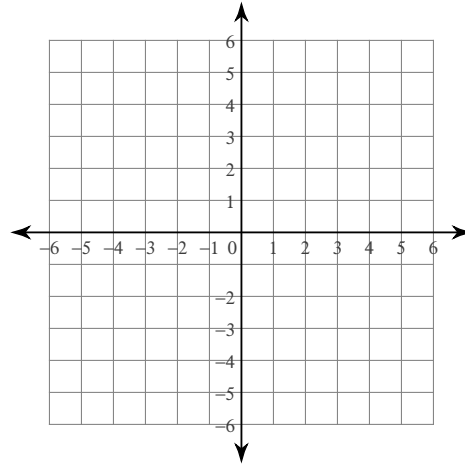
$$348) y = |x| - 1$$



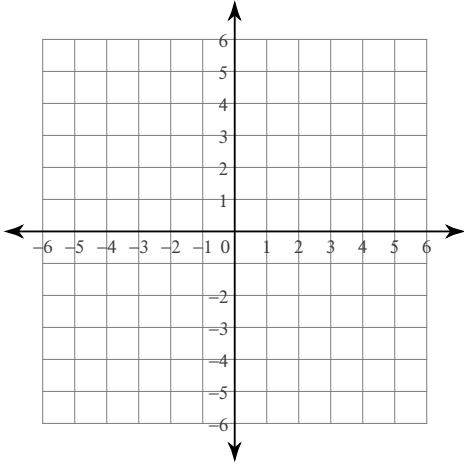
$$349) y = |x| - 3$$



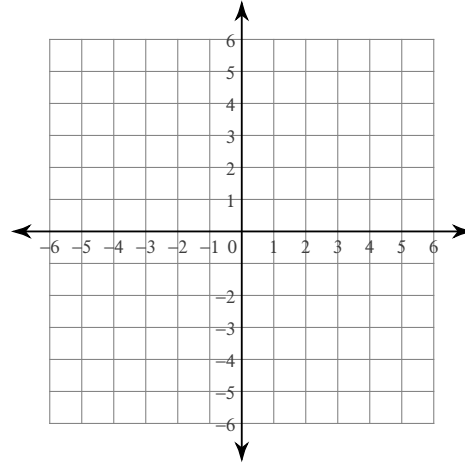
$$350) y = |x + 3| + 3$$



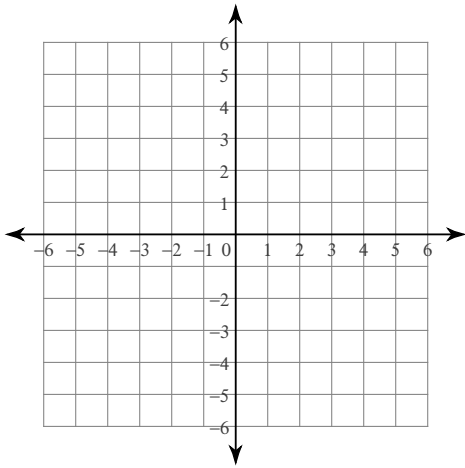
$$351) y = |x - 1|$$



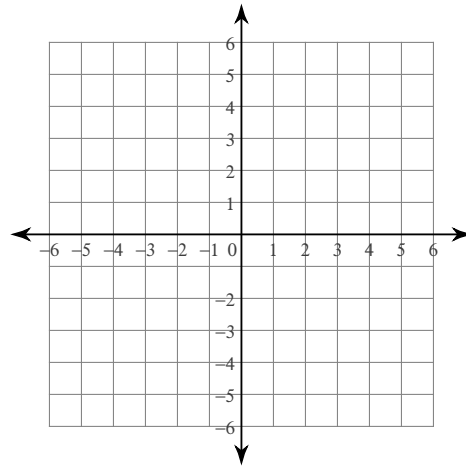
$$352) y = |x| + 4$$



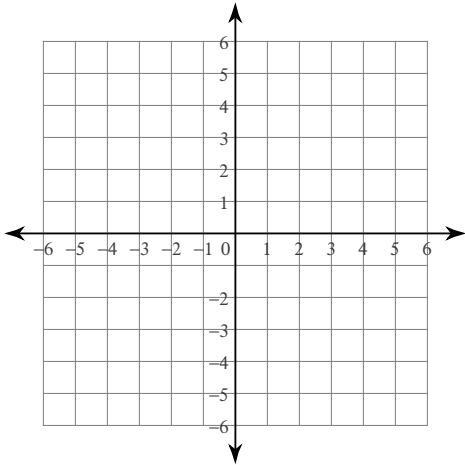
$$353) y = |x + 3|$$



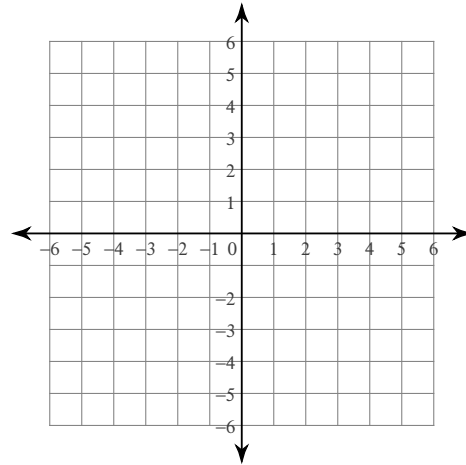
$$354) y = |x - 3| + 3$$



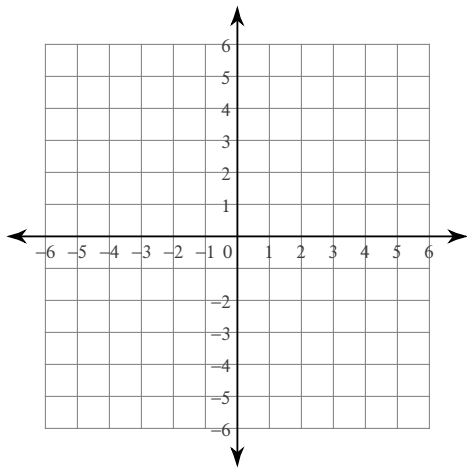
$$355) y = |x - 4| + 2$$



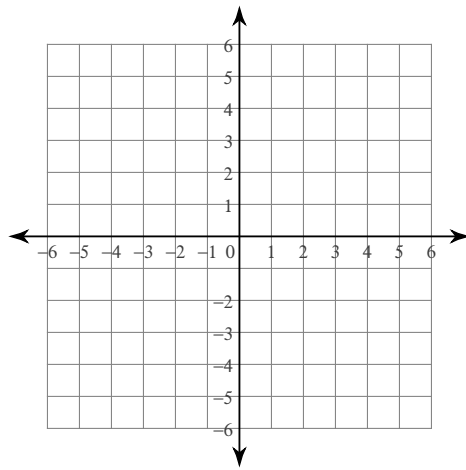
$$356) y = |x + 1|$$



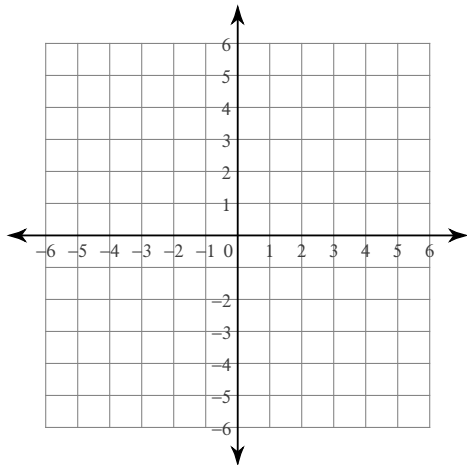
$$357) y = |x - 2| - 1$$



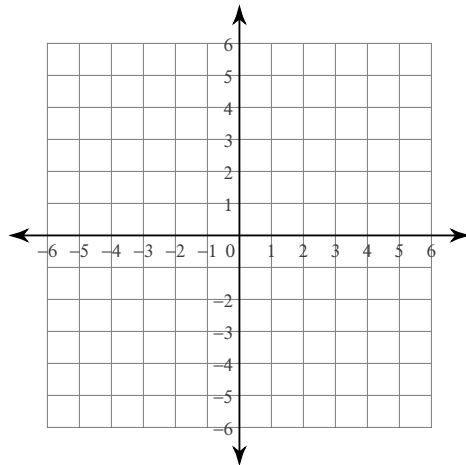
$$358) y = |x + 3| + 4$$



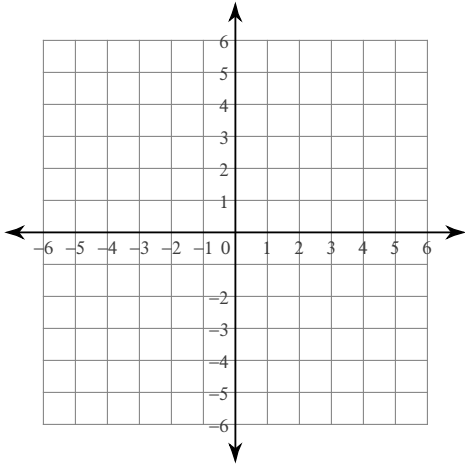
$$359) y = |x| + 3$$



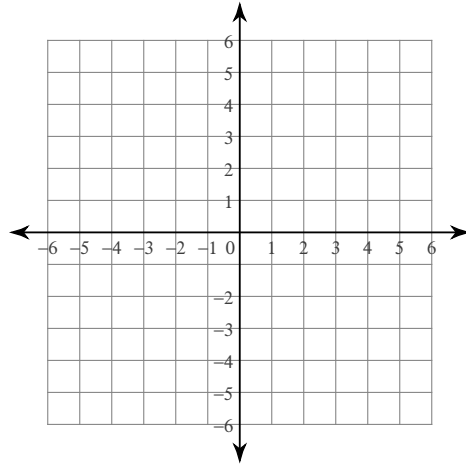
$$360) y = |x + 2| + 1$$



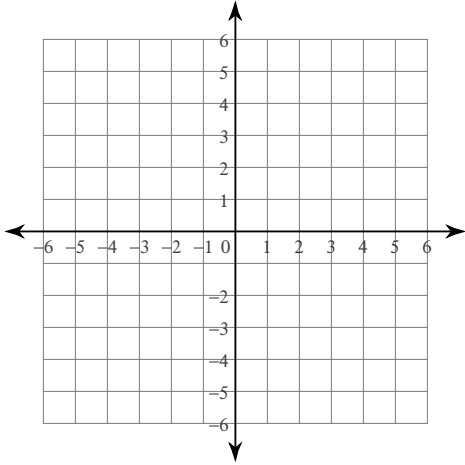
$$361) y = |x + 1| + 3$$



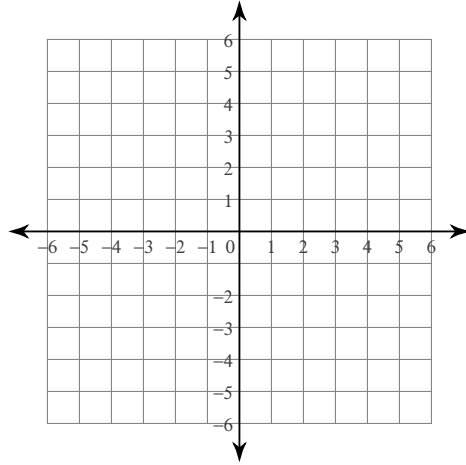
$$362) y = |x| - 4$$



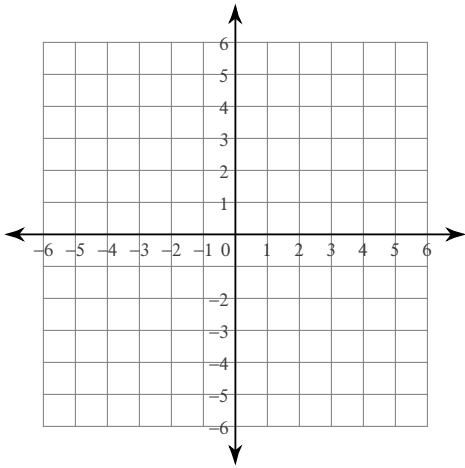
$$363) y = |x + 2| - 2$$



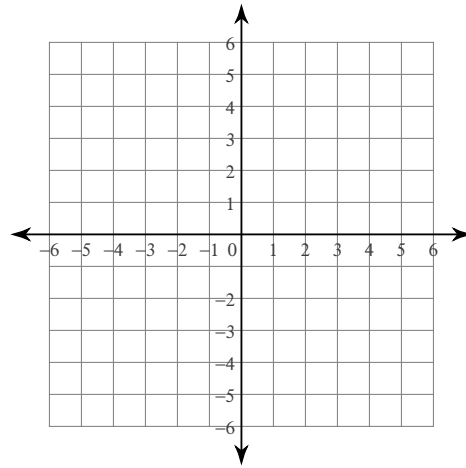
$$364) y = |x + 2| + 2$$



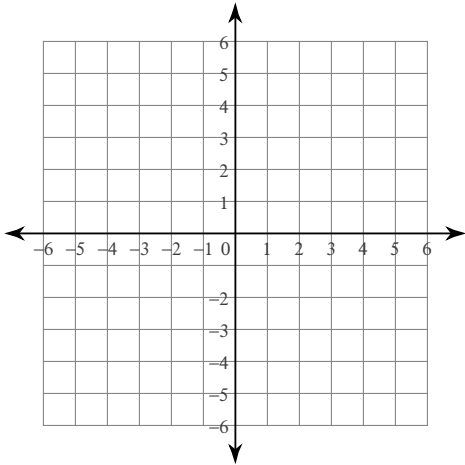
$$365) y = |x + 4| - 4$$



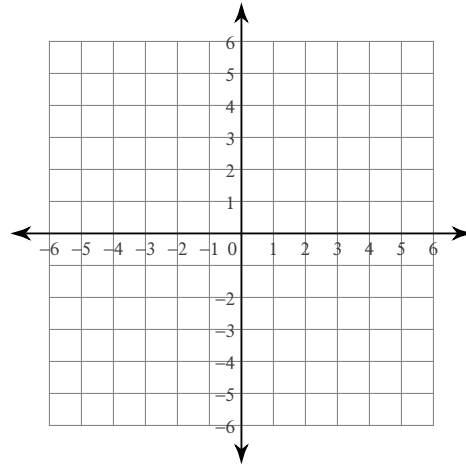
$$366) y = |x + 1| - 2$$



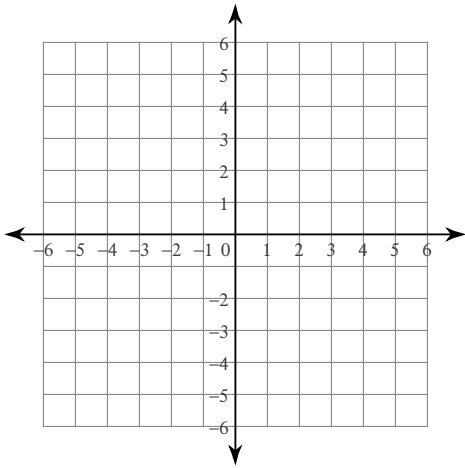
$$367) y = |x - 4| - 3$$



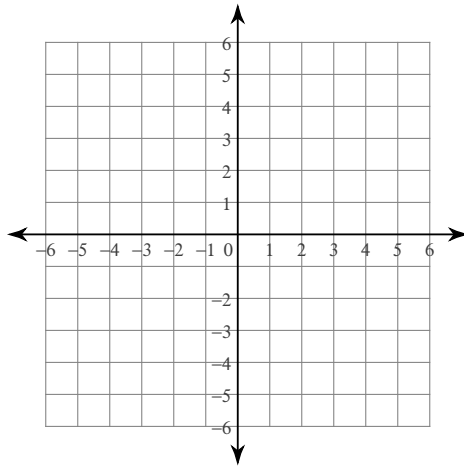
$$368) y = |x + 3| - 4$$



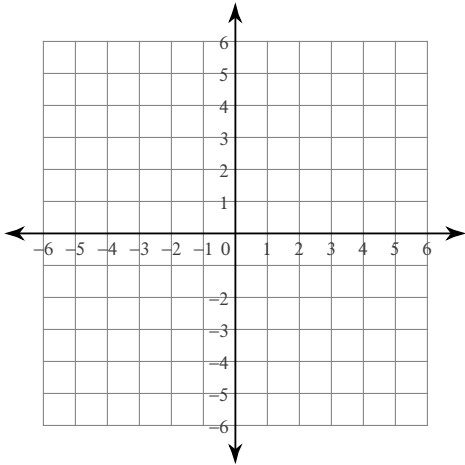
$$369) y = |x - 2| - 2$$



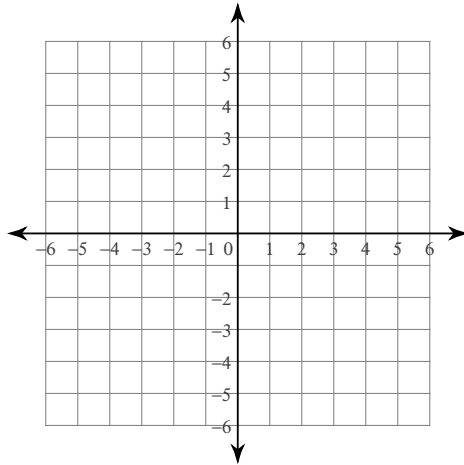
$$370) y = |x - 2|$$



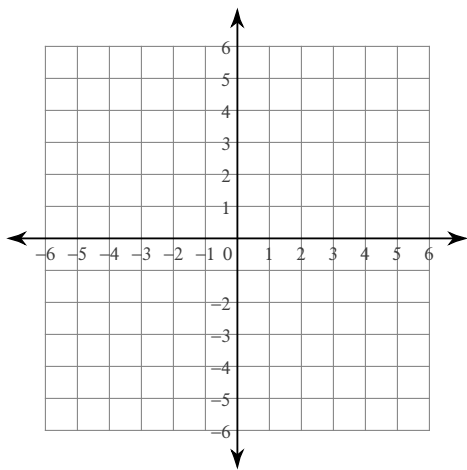
$$371) y = |x + 1| - 4$$



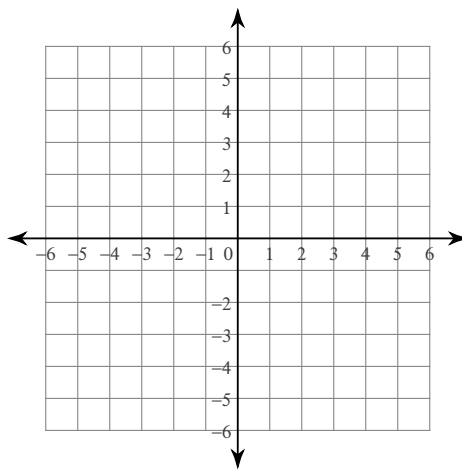
$$372) y = |x| - 2$$



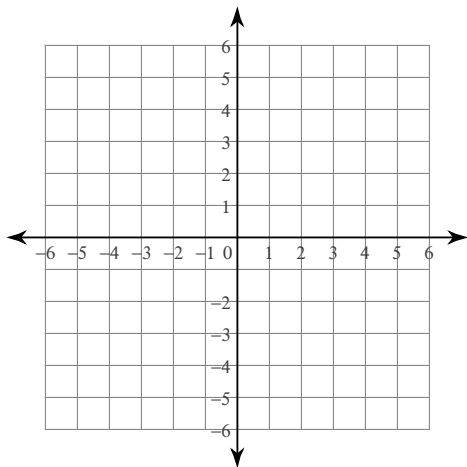
$$373) y = |x + 4| - 3$$



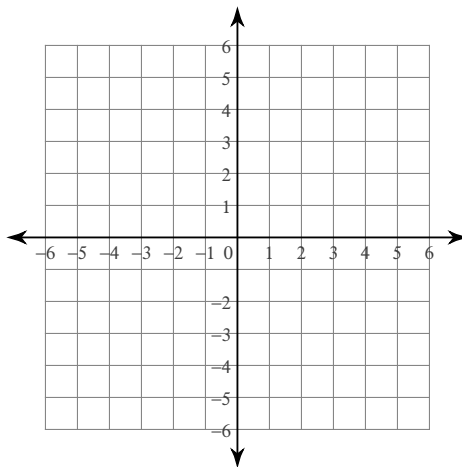
$$374) y = |x - 4|$$



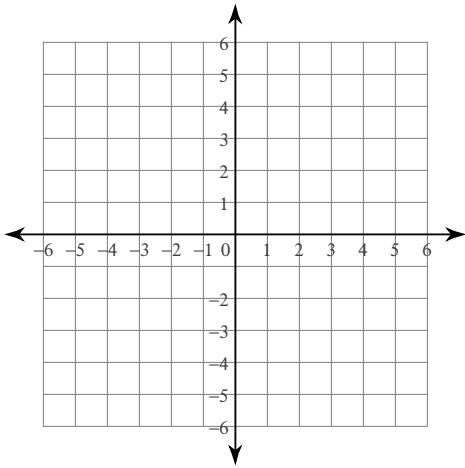
$$375) y = |x - 1| - 3$$



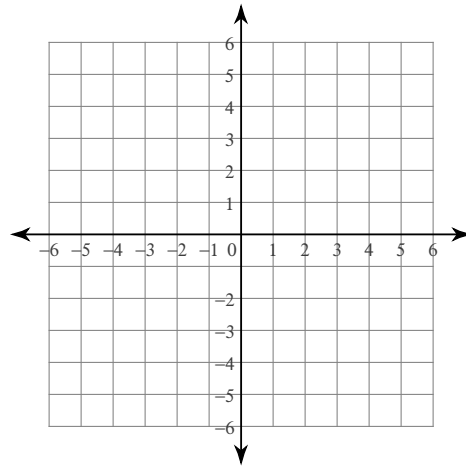
$$376) y = |x - 4| + 3$$



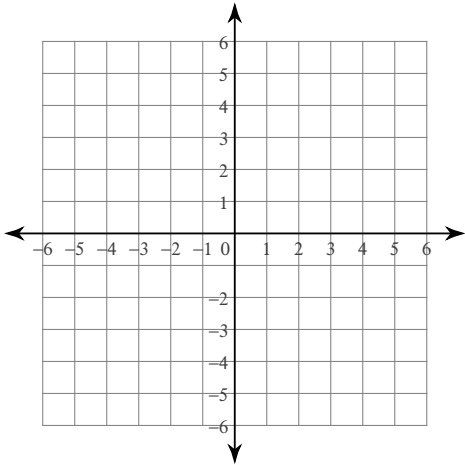
$$377) y = |x + 4| - 1$$



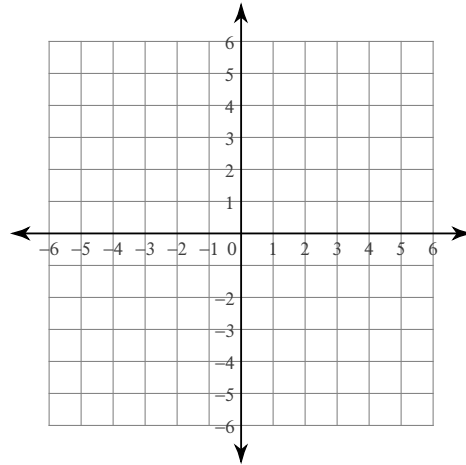
$$378) y = -|x - 1| + 3$$



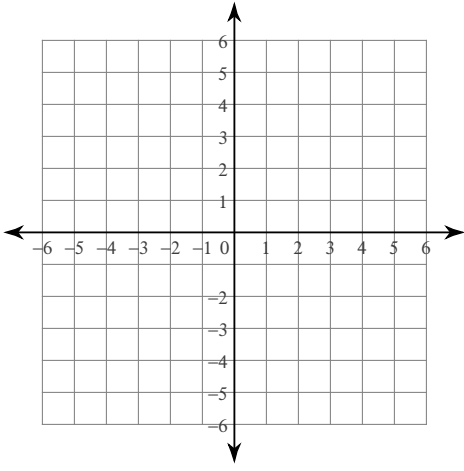
$$379) y = -|x - 2| + 1$$



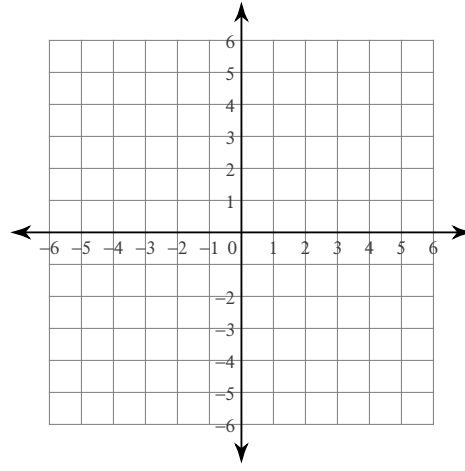
$$380) y = -|x - 3| - 1$$



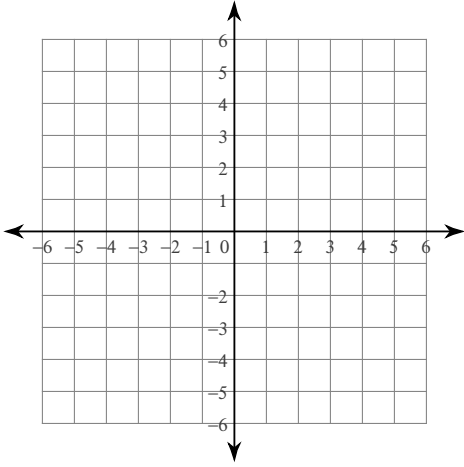
$$381) y = |x + 3| + 4$$



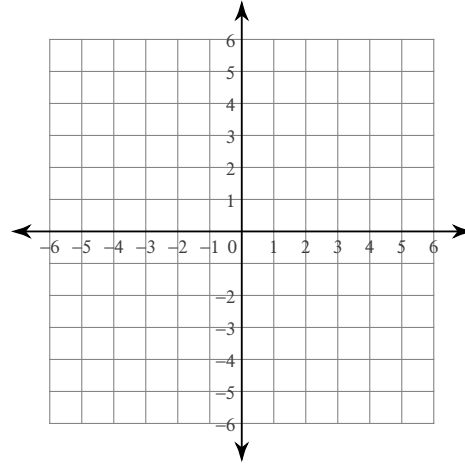
$$382) y = -|x - 4|$$



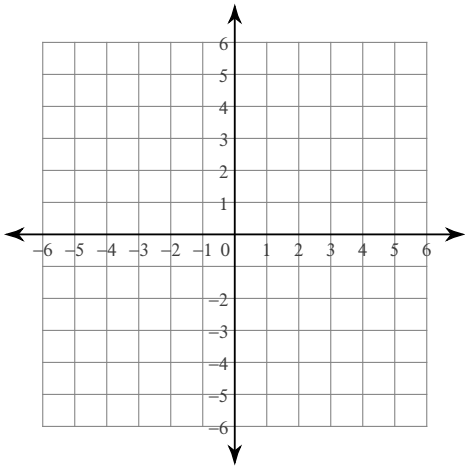
$$383) y = |x + 4| + 1$$



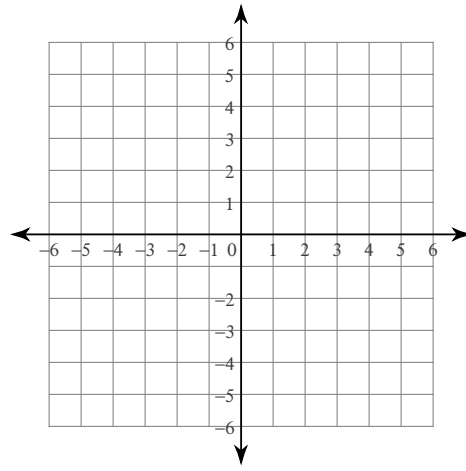
$$384) y = |x + 2|$$



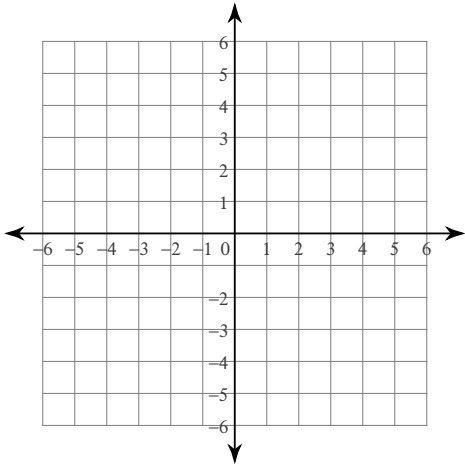
$$385) y = -|x + 4| - 3$$



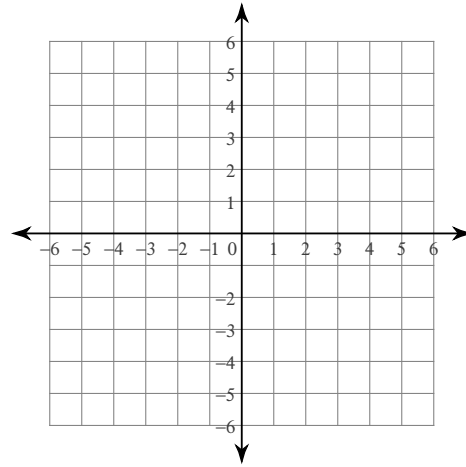
$$386) y = -|x + 4| + 3$$



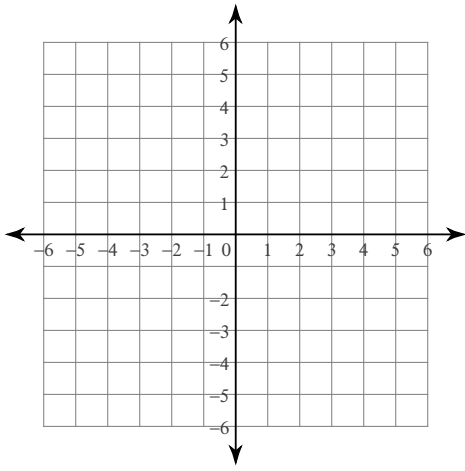
$$387) y = -|x + 2| + 1$$



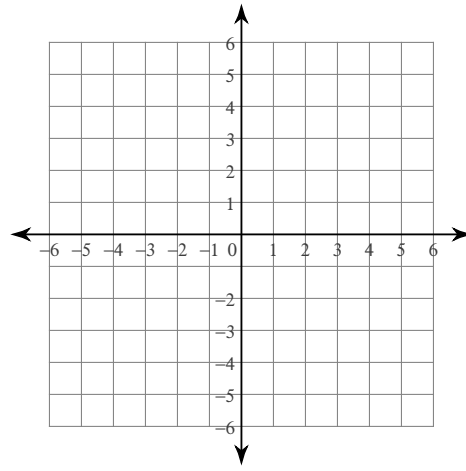
$$388) y = |x| - 2$$



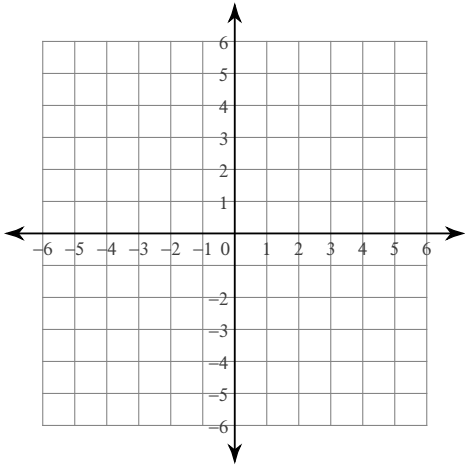
$$389) y = |x| - 4$$



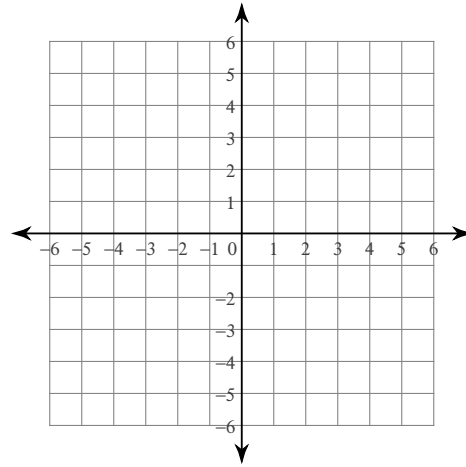
$$390) y = -|x + 4|$$



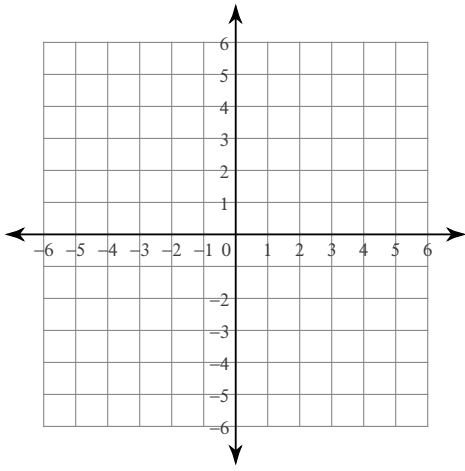
$$391) y = -|x + 1| - 1$$



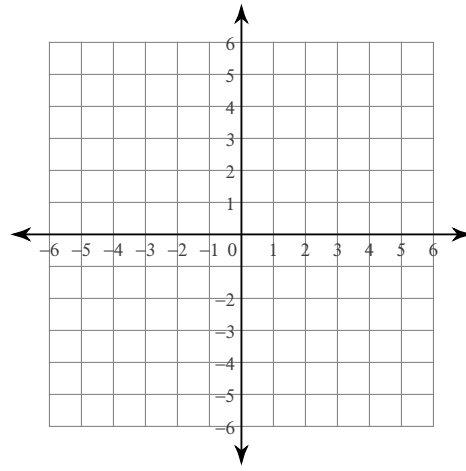
$$392) y = |x - 3|$$



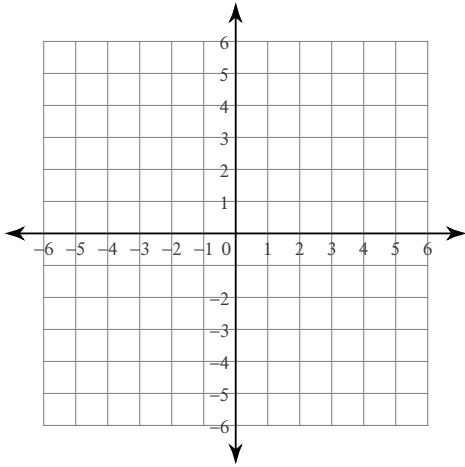
$$393) y = |x - 4|$$



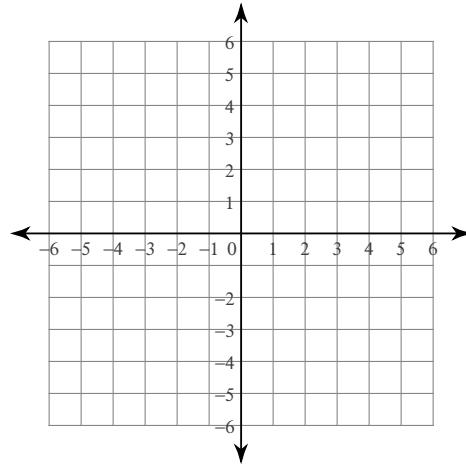
$$394) y = |x + 1| - 2$$



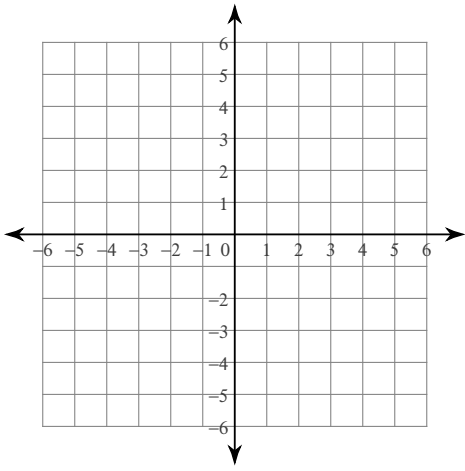
$$395) y = |x - 1|$$



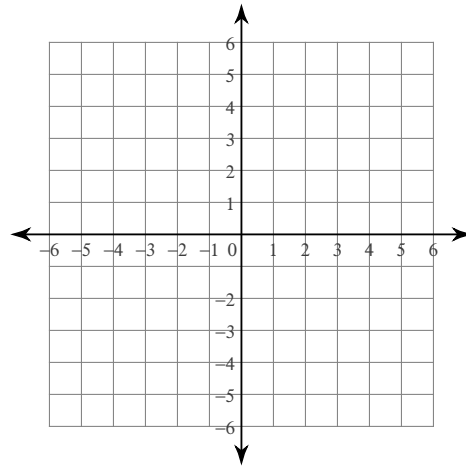
$$396) y = -|x - 1| - 1$$



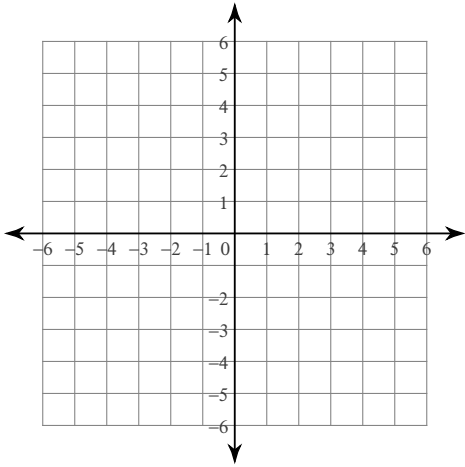
397) $y = -|x + 4| + 1$



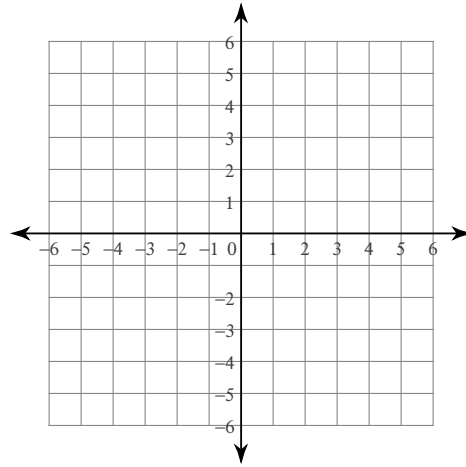
398) $y = -|x| - 1$



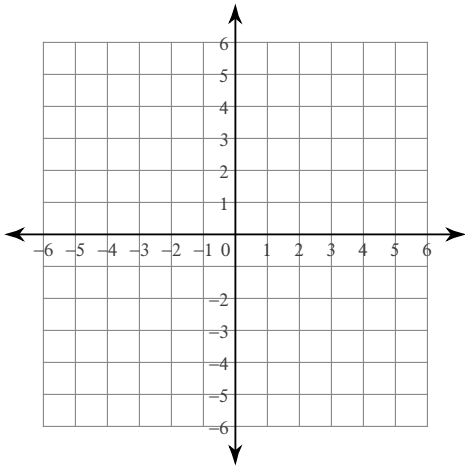
399) $y = -|x + 2| + 4$



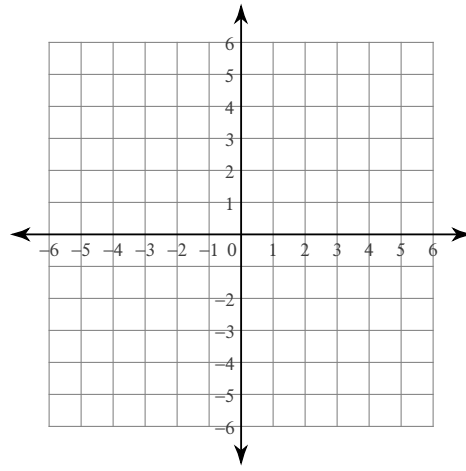
400) $y = -|x + 2| - 3$



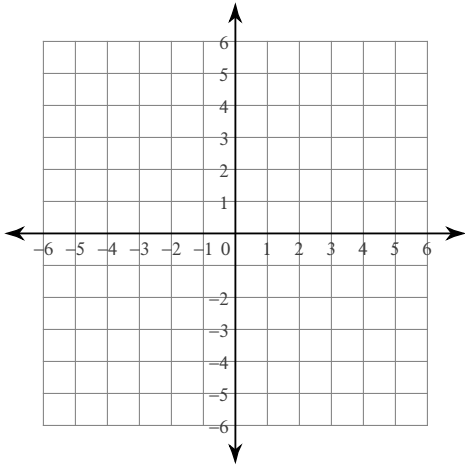
$$401) y = -|x - 2|$$



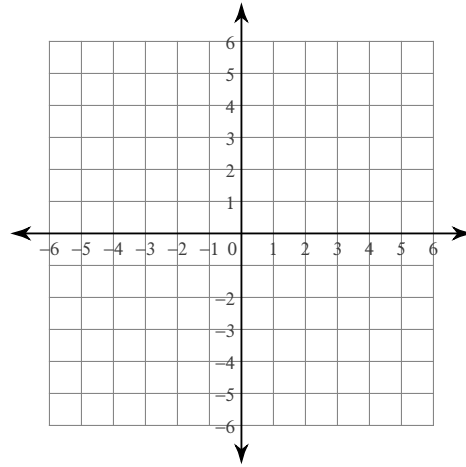
$$402) y = -|x + 4| - 1$$



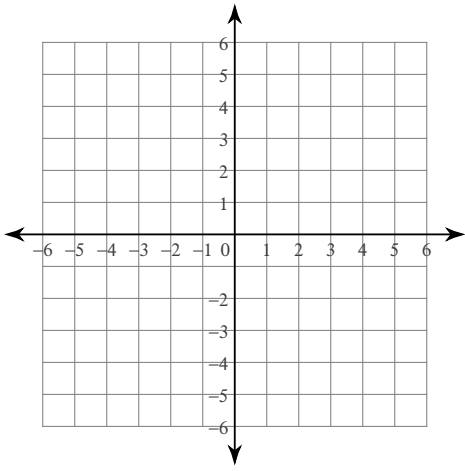
$$403) y = |x + 2| - 4$$



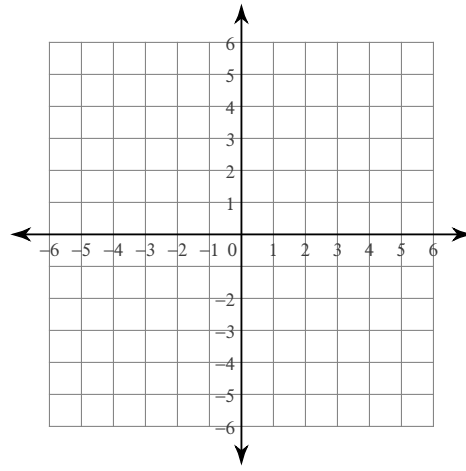
$$404) y = -|x + 3|$$



$$405) y = -|x + 3| - 1$$



$$406) y = -|x| + 4$$



Linear Equations Review

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Find the slope of each line.

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

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

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

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

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

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

7) $x = 4$
Undefined

8) $y = -\frac{8}{3}x - 4$ $-\frac{8}{3}$

9) $y = -\frac{10}{3}x - 5$ $-\frac{10}{3}$

10) $y = -4x - 4$
 -4

11) $y = x - 2$
 1

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

13) $y = 2x + 3$
 2

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

15) $y = -3$
 0

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

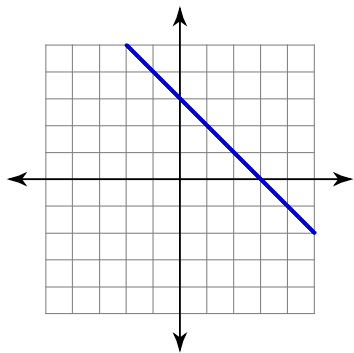
17) $y = \frac{1}{4}x - 5$ $\frac{1}{4}$

18) $y = -x + 3$
 -1

19) $x = 5$
Undefined

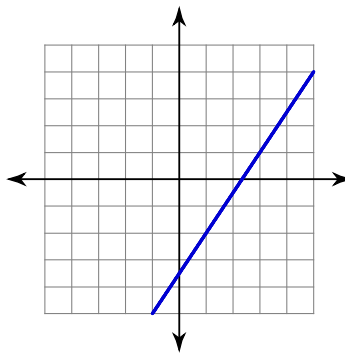
20) $y = -\frac{1}{2}x - 3$ $-\frac{1}{2}$

21)



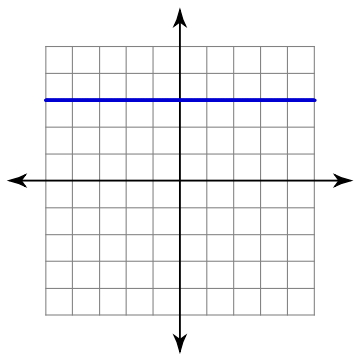
-1

22)



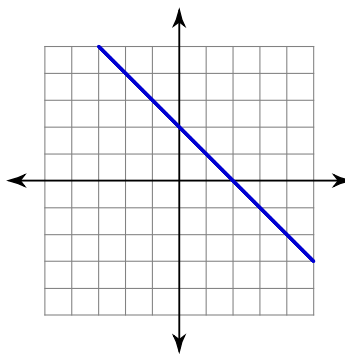
$\frac{3}{2}$

23)



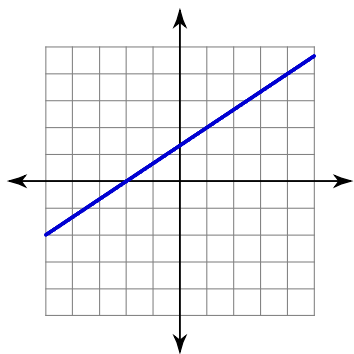
0

24)



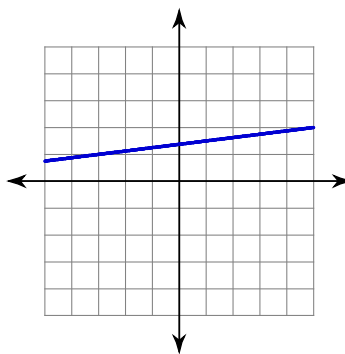
-1

25)



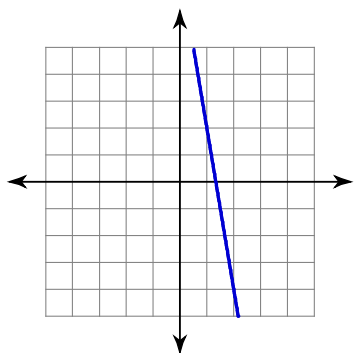
$\frac{2}{3}$

26)



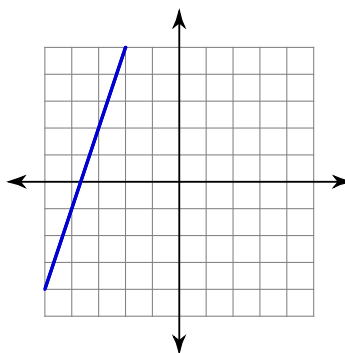
$\frac{1}{8}$

27)



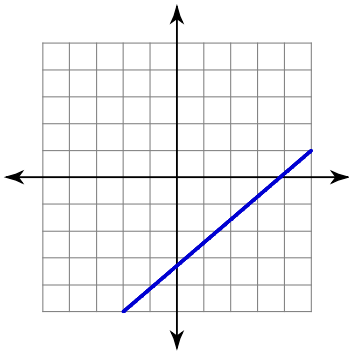
-6

28)

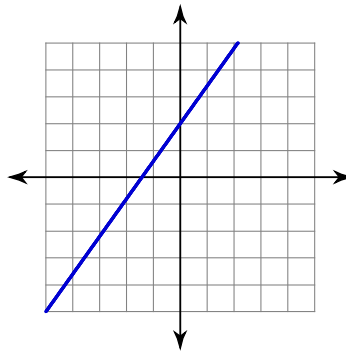


3

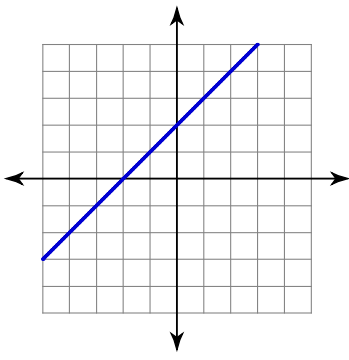
29) $\frac{6}{7}$



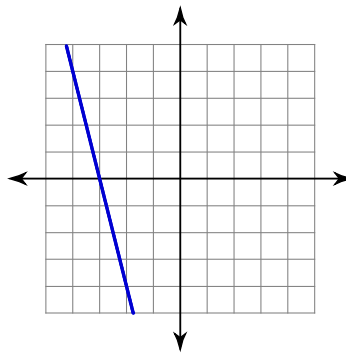
30) $\frac{7}{5}$



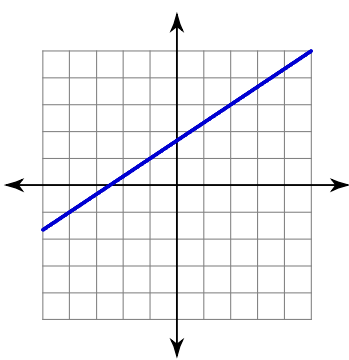
31)



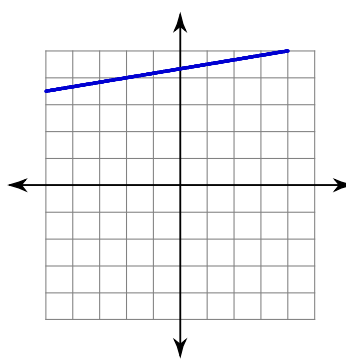
32)



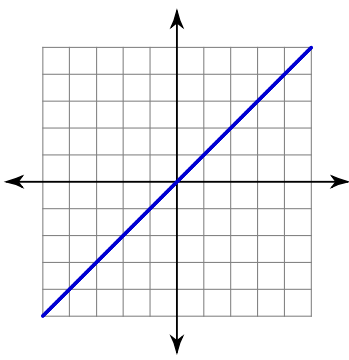
33) $\frac{2}{3}$



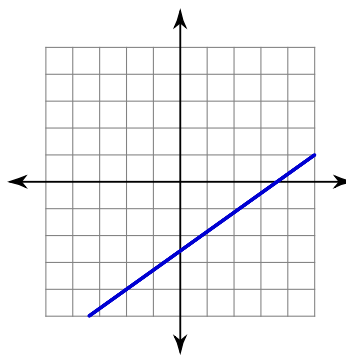
34) $\frac{1}{6}$



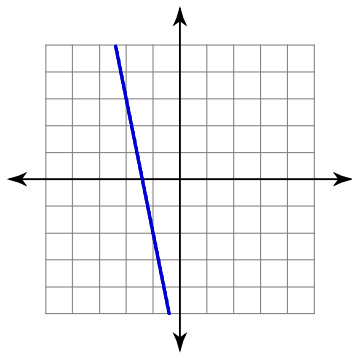
35)



36) $\frac{5}{7}$

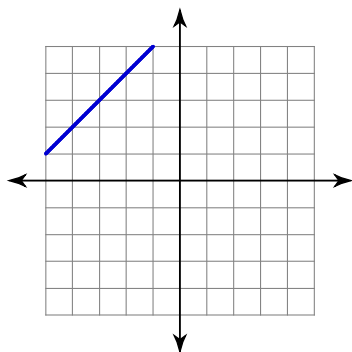


37)



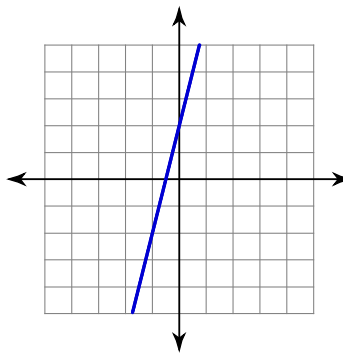
-5

39)



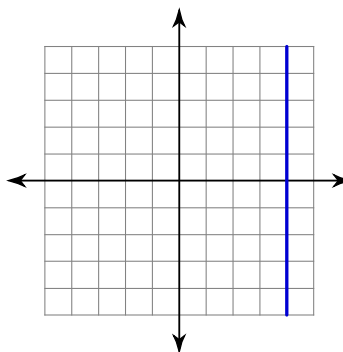
1

38)



4

40)



Undefined

Find the slope of a line perpendicular to each given line.

41) $0 = -4 + 5x - 4y$ $-\frac{4}{5}$

42) $-16 = -6x - 8y$ $\frac{4}{3}$

43) $4 = 3x + 2y$ $\frac{2}{3}$

44) $-y + x = 0$
-1

45) $-x - 5y = 0$
5

46) $1 - y = -x$
-1

47) $2x = -12 + 3y$ $-\frac{3}{2}$

48) $5 = -y$
Undefined

49) $4y = -12 - 3x$ $\frac{4}{3}$

50) $3x + 8 + 2y = 0$ $\frac{2}{3}$

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

52) $-30 - 9x = -15y$ $-\frac{5}{3}$

53) $15 = -5y - 4x$ $\frac{5}{4}$

54) $-y - 5 = 8x$ $\frac{1}{8}$

55) $-y = 5 - x$
-1

56) $5 = -x - y$
1

57) $15 - 6x + 3y = 0$ $-\frac{1}{2}$

58) $x - y = -3$
-1

59) $x = -2y + 6$

2

61) $9 = 3y + 6x$ $\frac{1}{2}$

63) $0 = 5y + x - 15$

5

65) $-4y + 7x = -12$ $-\frac{4}{7}$

67) $20 = 6x - 5y$ $-\frac{5}{6}$

69) $20 = -x - 4y$

4

60) $3y + 3 = 12x$ $-\frac{1}{4}$

62) $-7x - 2 = -y$ $-\frac{1}{7}$

64) $-3y + 8x + 9 = 0$ $-\frac{3}{8}$

66) $3y + \frac{6}{5}x = -12$ $\frac{5}{2}$

68) $3x = 2y - 2$ $-\frac{2}{3}$

70) $2 + y = -x$

1

Find the value of x or y so that the line through the points has the given slope.

71) $(-5, -2)$ and $(1, y)$; slope: $\frac{5}{6}$

3

73) $(x, 1)$ and $(0, -3)$; slope: $\frac{4}{5}$

5

75) $(2, -1)$ and $(x, 1)$; slope: $-\frac{1}{2}$

-2

77) $(x, -4)$ and $(4, 3)$; slope: 7

3

79) $(x, -5)$ and $(3, -3)$; slope: -1

5

81) $(-4, y)$ and $(-2, 5)$; slope: 5

-5

83) $(-3, 4)$ and $(x, 3)$; slope: 1

-4

85) $(1, -5)$ and $(x, -5)$; slope: 1

1

72) $(3, 3)$ and $(-3, y)$; slope: $\frac{2}{3}$

-1

74) $(-5, -2)$ and $(-2, y)$; slope: $\frac{4}{3}$

2

76) $(x, 0)$ and $(2, 2)$; slope: $\frac{2}{3}$

-1

78) $(x, 4)$ and $(-1, -1)$; slope: 5

0

80) $(-3, -5)$ and $(x, 5)$; slope: 10

-2

82) $(-4, -2)$ and $(x, -1)$; slope: $\frac{1}{9}$

5

84) $(0, 4)$ and $(x, 3)$; slope: $\frac{1}{4}$

-4

86) $(1, 5)$ and $(5, y)$; slope: $-\frac{5}{2}$

-5

87) $(-2, 3)$ and $(-4, y)$; slope: $\frac{7}{2}$

-4

89) $(5, -1)$ and $(x, 0)$; slope: $-\frac{1}{9}$

-4

91) $(3, -3)$ and $(x, -1)$; slope: -1

1

93) $(-1, y)$ and $(-5, -4)$; slope: $\frac{1}{4}$

-3

95) $(5, -4)$ and $(x, 2)$; slope: -6

4

97) $(1, 4)$ and $(-1, y)$; slope: 1

2

99) $(2, 4)$ and $(x, 3)$; slope: $\frac{1}{6}$

-4

101) $(x, -18)$ and $(17, -8)$; slope: $\frac{5}{6}$

5

103) $(-12, y)$ and $(-18, -6)$; slope: 0

-6

105) $(-16, y)$ and $(-20, -1)$; slope: $\frac{17}{4}$

16

107) $(8, 5)$ and $(-1, y)$; slope: $\frac{20}{9}$

-15

109) $(7, 17)$ and $(x, -17)$; slope: $\frac{17}{8}$

-9

111) $(19, -18)$ and $(x, -8)$; slope: undefined

19

88) $(2, y)$ and $(4, 0)$; slope: -1

2

90) $(-2, -1)$ and $(x, 3)$; slope: -4

-3

92) $(x, -5)$ and $(-3, 0)$; slope: $-\frac{5}{7}$

4

94) $(-2, y)$ and $(1, -5)$; slope: -1

-2

96) $(-2, y)$ and $(1, -4)$; slope: $-\frac{1}{3}$

-3

98) $(-2, y)$ and $(3, -2)$; slope: $-\frac{3}{5}$

1

100) $(3, y)$ and $(-5, 3)$; slope: -1

-5

102) $(-1, y)$ and $(-14, -2)$; slope: -1

-15

104) $(4, 6)$ and $(-12, y)$; slope: $-\frac{1}{2}$

14

106) $(-15, -9)$ and $(x, 7)$; slope: -8

-17

108) $(-5, y)$ and $(-15, 19)$; slope: $-\frac{7}{10}$

12

110) $(11, -2)$ and $(x, 19)$; slope: $-\frac{7}{6}$

-7

112) $(x, -19)$ and $(-14, 15)$; slope: $-\frac{17}{6}$

-2

114) $(x, -2)$ and $(-20, 12)$; slope: $-\frac{2}{3}$

1

116) $(-1, -8)$ and $(x, 2)$; slope: $\frac{10}{9}$

8

118) $(9, 8)$ and $(5, y)$; slope: 6

-16

120) $(9, -4)$ and $(1, y)$; slope: $-\frac{7}{8}$

3

122) $(-15, y)$ and $(9, -2)$; slope: $-\frac{1}{3}$

6

124) $(x, -20)$ and $(-3, -6)$; slope: $-\frac{7}{9}$

15

126) $(x, 0)$ and $(2, 1)$; slope: $\frac{1}{7}$

-5

128) $(x, 8)$ and $(16, -8)$; slope: 4

20

130) $(-3, -20)$ and $(x, -1)$; slope: $-\frac{19}{5}$

-8

132) $(1\frac{2}{3}, y)$ and $(1\frac{1}{3}, \frac{1}{2})$; slope: $-6 - \frac{3}{2}$

134) $(-1, \frac{2}{3})$ and $(x, -3\frac{1}{2})$; slope: $\frac{5}{2} - 2\frac{2}{3}$

113) $(x, -12)$ and $(1, -5)$; slope: $\frac{7}{10}$

-9

115) $(-15, 0)$ and $(9, y)$; slope: $\frac{2}{3}$

16

117) $(-11, -14)$ and $(-18, y)$; slope: $\frac{4}{7}$

-18

119) $(x, 1)$ and $(-11, -20)$; slope: $-\frac{21}{5}$

-16

121) $(-2, -3)$ and $(-3, y)$; slope: -3

0

123) $(2, 9)$ and $(-14, y)$; slope: 0

9

125) $(-13, -9)$ and $(-19, y)$; slope: $-\frac{3}{2}$

0

127) $(-15, y)$ and $(-12, -12)$; slope: $\frac{2}{3}$

-14

129) $(15, y)$ and $(-9, 3)$; slope: $\frac{2}{3}$

19

131) $(0, 1)$ and $(x, -1)$; slope: -1

2

133) $(x, 2)$ and $(2\frac{1}{2}, -2\frac{1}{2})$; slope: $-\frac{9}{4} \frac{1}{2}$

135) $(\frac{1}{2}, 0)$ and $(x, -1\frac{2}{3})$; slope: $-\frac{5}{6} 2\frac{1}{2}$

$$136) \left(\frac{2}{3}, -1\right) \text{ and } (0, y); \text{ slope: } 2 - 2\frac{1}{3}$$

$$137) (2, y) \text{ and } \left(2\frac{1}{3}, -\frac{5}{3}\right); \text{ slope: } -\frac{1}{2} - 1\frac{1}{2}$$

$$138) \left(-\frac{2}{3}, y\right) \text{ and } \left(-2, \frac{3}{2}\right); \text{ slope: } -\frac{5}{8} \frac{2}{3}$$

$$139) \left(\frac{5}{3}, -3\frac{2}{3}\right) \text{ and } \left(\frac{1}{2}, y\right); \text{ slope: } -1 - 2\frac{1}{2}$$

$$140) (2, y) \text{ and } \left(-\frac{2}{3}, 0\right); \text{ slope: } \frac{1}{4} \frac{2}{3}$$

$$141) \left(-1, -1\frac{2}{3}\right) \text{ and } (x, 2); \text{ slope: } -\frac{11}{6}$$

-3

$$142) (-2, y) \text{ and } \left(-\frac{4}{3}, -2\frac{1}{2}\right); \text{ slope: } -\frac{19}{4} \frac{2}{3}$$

$$143) \left(-\frac{5}{3}, \frac{2}{3}\right) \text{ and } \left(-1\frac{1}{2}, y\right); \text{ slope: } -10$$

-1

$$144) (-2, 0) \text{ and } (x, 1); \text{ slope: } \frac{3}{10} 1\frac{1}{3}$$

$$145) \left(-\frac{4}{3}, 1\frac{1}{2}\right) \text{ and } \left(x, -\frac{1}{2}\right); \text{ slope: } -1 \frac{2}{3}$$

$$146) \left(\frac{2}{3}, -2\frac{2}{3}\right) \text{ and } (x, -1); \text{ slope: } 2 \frac{3}{2}$$

$$147) (x, 2) \text{ and } \left(-\frac{1}{2}, -1\frac{2}{3}\right); \text{ slope: } -\frac{22}{9}$$

-2

$$148) \left(1\frac{1}{2}, 1\right) \text{ and } (x, -2); \text{ slope: } -3 2\frac{1}{2}$$

$$149) (0, y) \text{ and } \left(\frac{1}{2}, -2\frac{1}{3}\right); \text{ slope: } \frac{1}{3} - 2\frac{1}{2}$$

$$150) (x, -1) \text{ and } \left(-2, -2\frac{1}{3}\right); \text{ slope: } \frac{2}{3}$$

$$151) \left(1\frac{1}{2}, y\right) \text{ and } \left(-\frac{3}{2}, \frac{1}{3}\right); \text{ slope: } 0 \frac{1}{3}$$

0

$$152) \left(x, -2\frac{1}{2}\right) \text{ and } (0, 3); \text{ slope: } -\frac{11}{6}$$

$$153) \left(\frac{4}{3}, 0\right) \text{ and } \left(x, \frac{1}{3}\right); \text{ slope: } -\frac{1}{6} - \frac{2}{3}$$

3

$$154) \left(-1\frac{1}{2}, 2\frac{1}{3}\right) \text{ and } (x, 1); \text{ slope: } -\frac{4}{3} - \frac{1}{2}$$

$$155) \left(2\frac{1}{2}, 1\frac{1}{2}\right) \text{ and } (1, y); \text{ slope: } 0 1\frac{1}{2}$$

$$156) (2, y) \text{ and } (-1, 0); \text{ slope: } \frac{1}{3}$$

$$157) (-2, y) \text{ and } \left(2, -3\frac{1}{2}\right); \text{ slope: } -\frac{5}{4} 1\frac{1}{2}$$

1

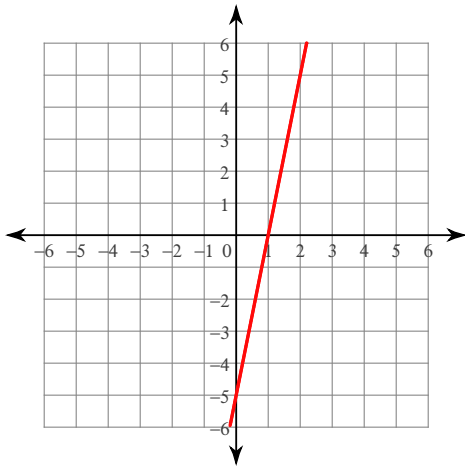
$$158) \left(-2\frac{2}{3}, \frac{1}{3}\right) \text{ and } \left(-1\frac{1}{2}, y\right); \text{ slope: } -\frac{11}{7} - 1\frac{1}{2}$$

$$159) \left(\frac{1}{3}, 2\frac{1}{3}\right) \text{ and } \left(-\frac{1}{2}, y\right); \text{ slope: } \frac{6}{5} \frac{4}{3}$$

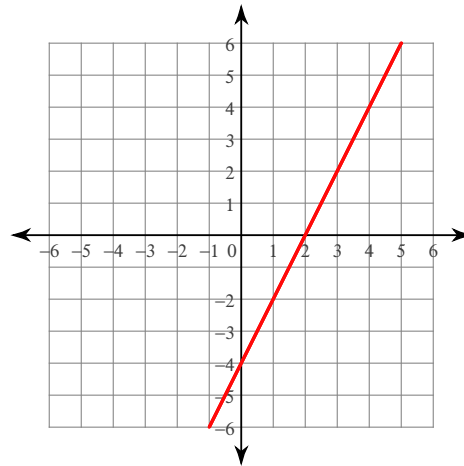
160) $\left(\frac{4}{3}, y\right)$ and $\left(1\frac{1}{2}, -1\frac{1}{2}\right)$; slope: $-13\frac{2}{3}$

Sketch the graph of each line.

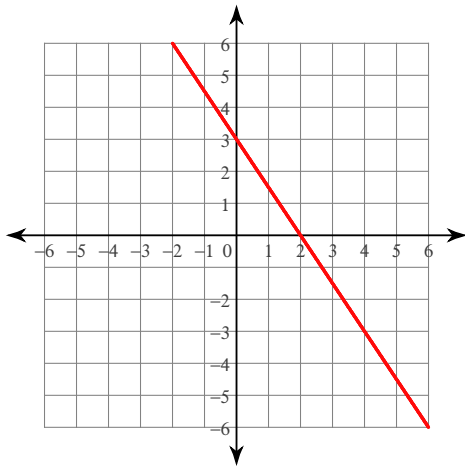
161) x-intercept = 1, y-intercept = -5



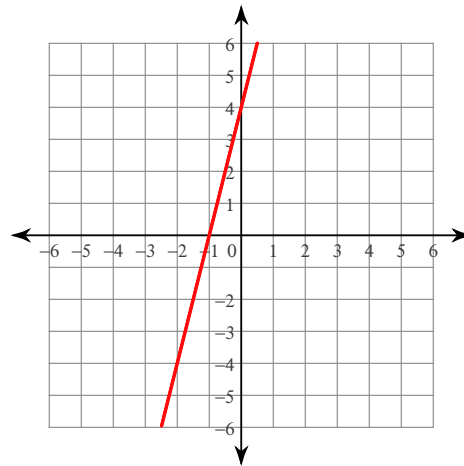
162) x-intercept = 2, y-intercept = -4



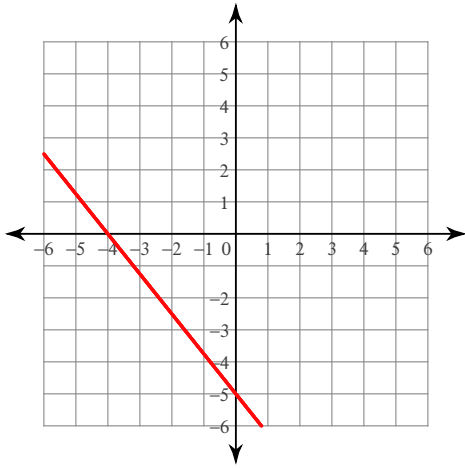
163) x-intercept = 2, y-intercept = 3



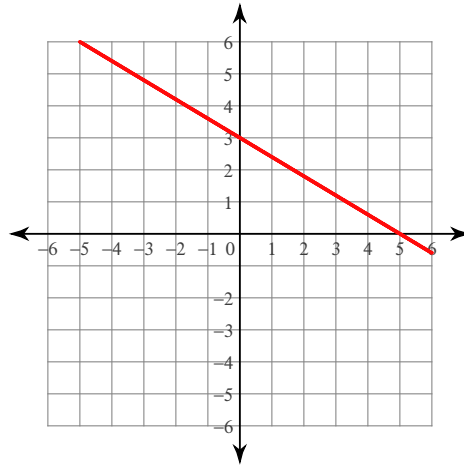
164) x-intercept = -1, y-intercept = 4



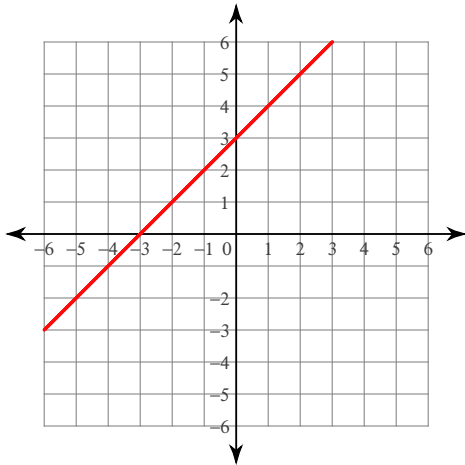
165) x-intercept = -4, y-intercept = -5



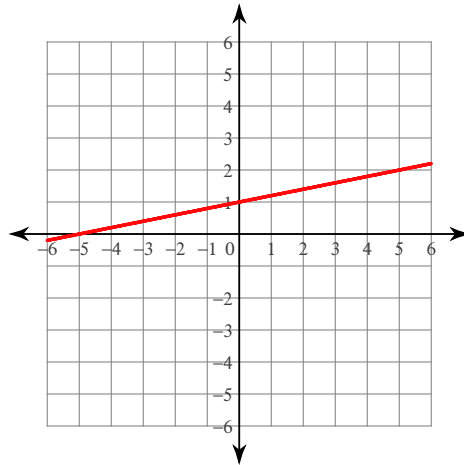
166) x-intercept = 5, y-intercept = 3



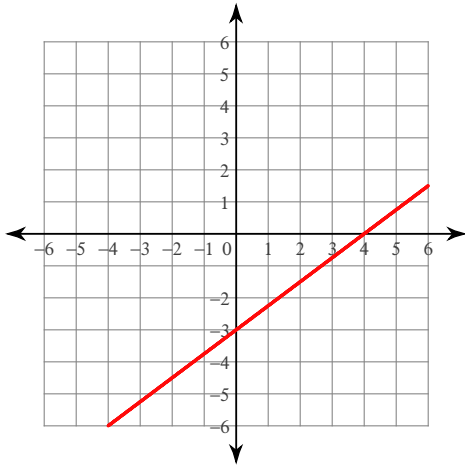
167) x-intercept = -3, y-intercept = 3



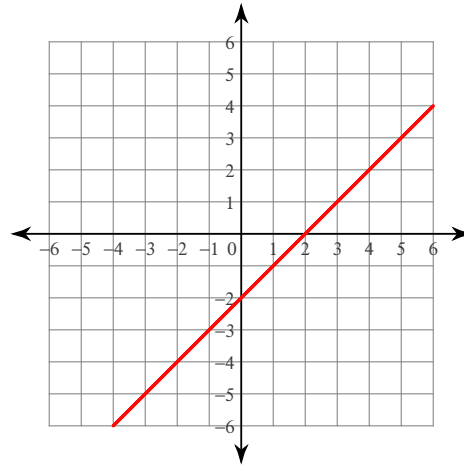
168) x-intercept = -5, y-intercept = 1



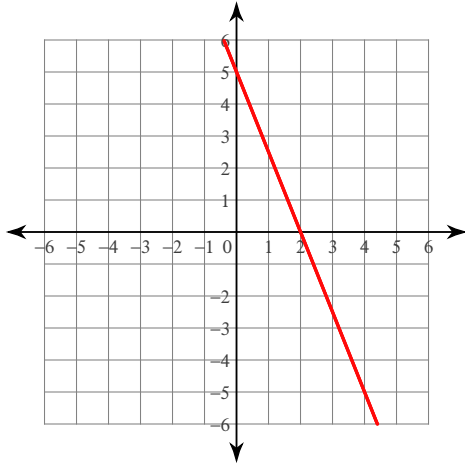
169) x-intercept = 4, y-intercept = -3



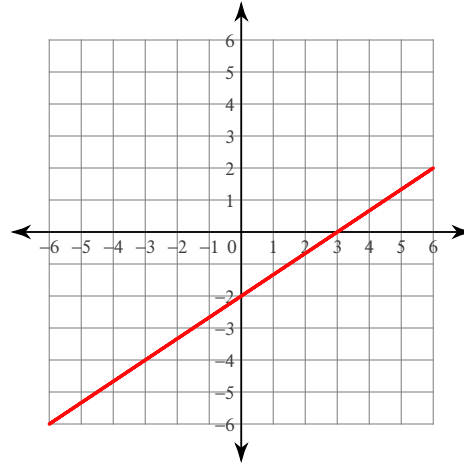
170) x-intercept = 2, y-intercept = -2



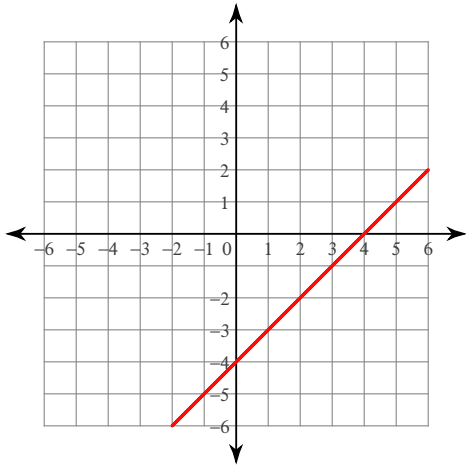
171) x-intercept = 2, y-intercept = 5



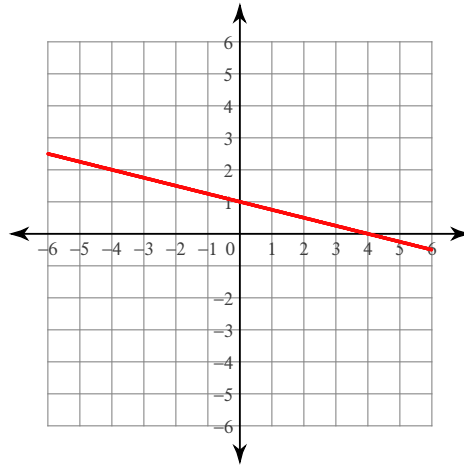
172) x-intercept = 3, y-intercept = -2



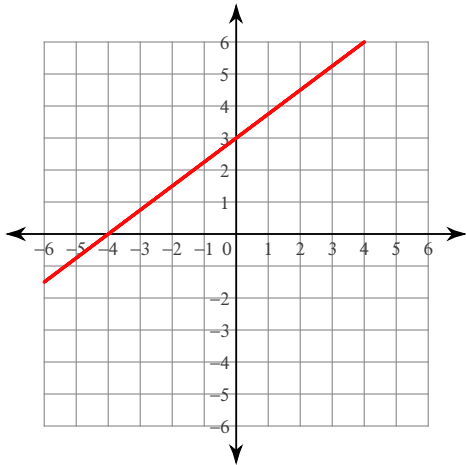
173) x -intercept = 4, y -intercept = -4



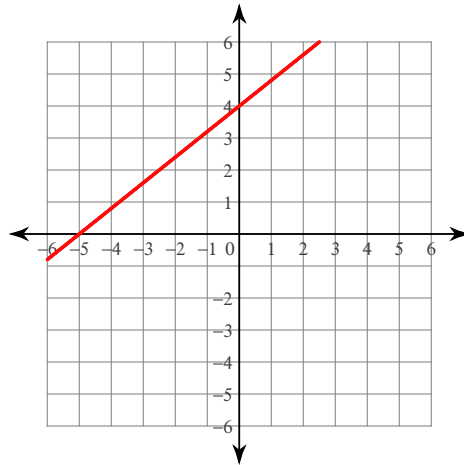
174) x -intercept = 4, y -intercept = 1



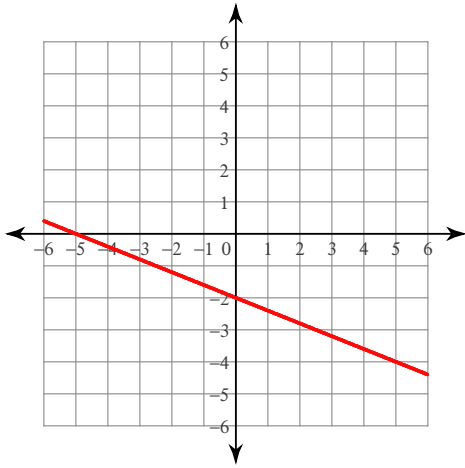
175) x -intercept = -4, y -intercept = 3



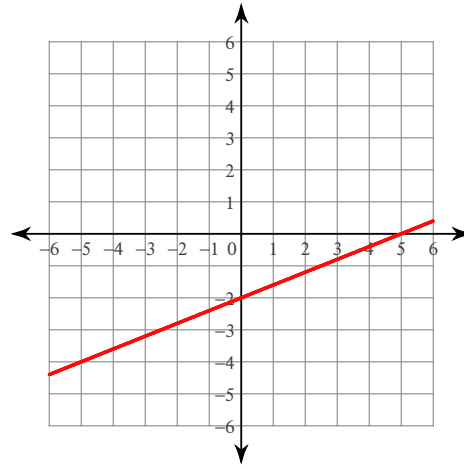
176) x -intercept = -5, y -intercept = 4



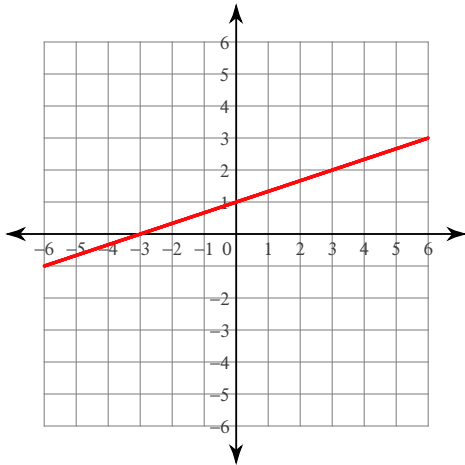
177) x-intercept = -5 , y-intercept = -2



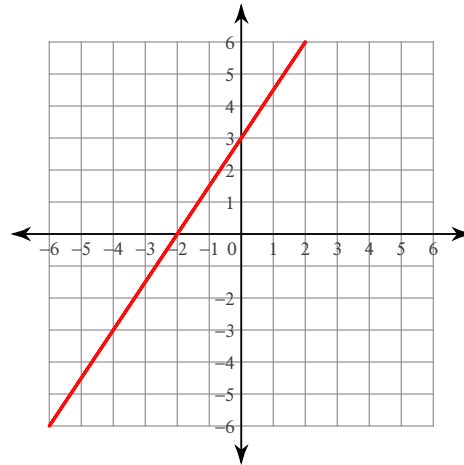
178) x-intercept = 5 , y-intercept = -2



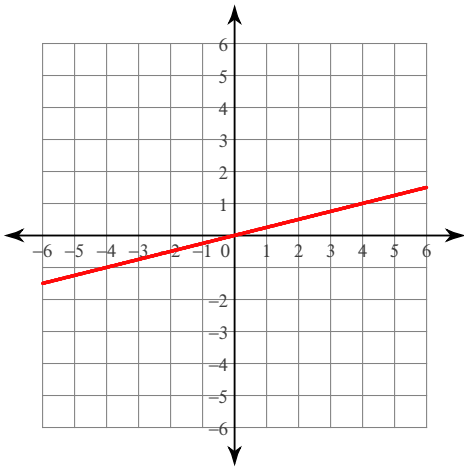
179) x-intercept = -3 , y-intercept = 1



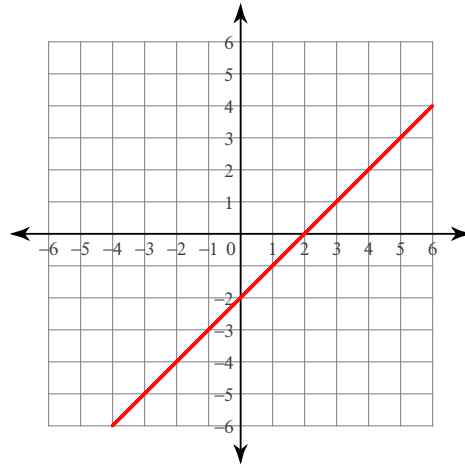
180) x-intercept = -2 , y-intercept = 3



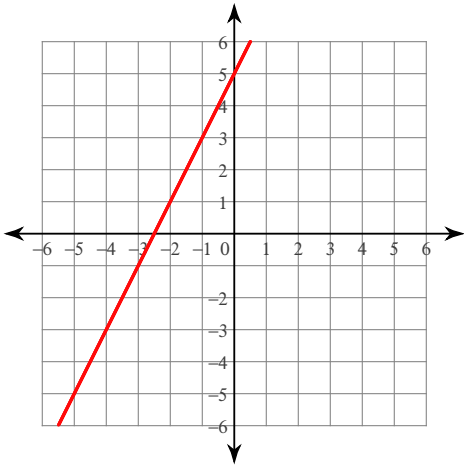
$$181) y = \frac{1}{4}x$$



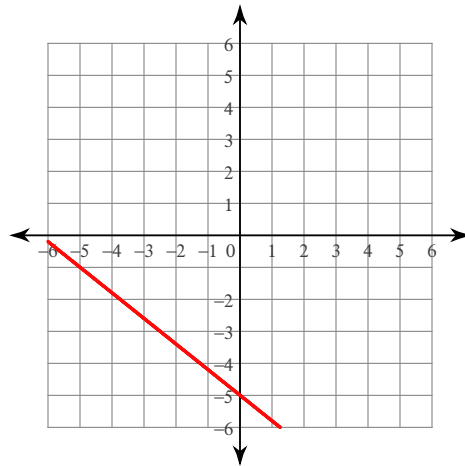
$$182) y = x - 2$$



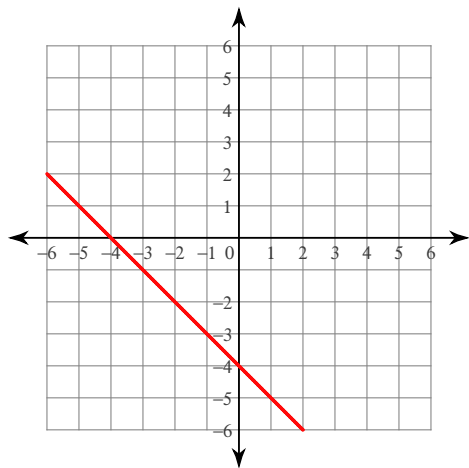
$$183) y = 2x + 5$$



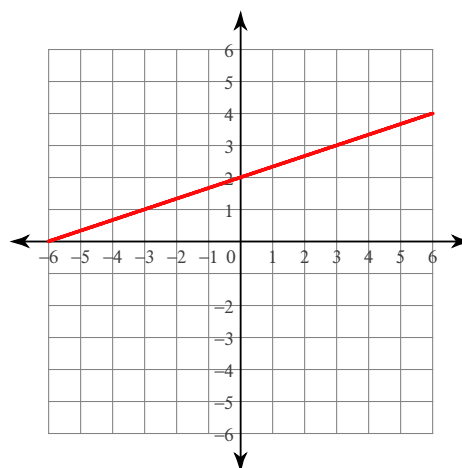
$$184) y = -\frac{4}{5}x - 5$$



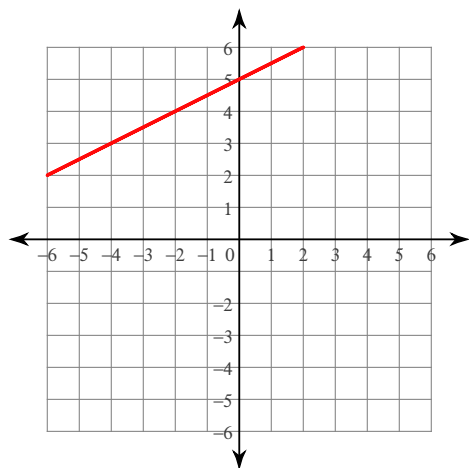
185) $y = -x - 4$



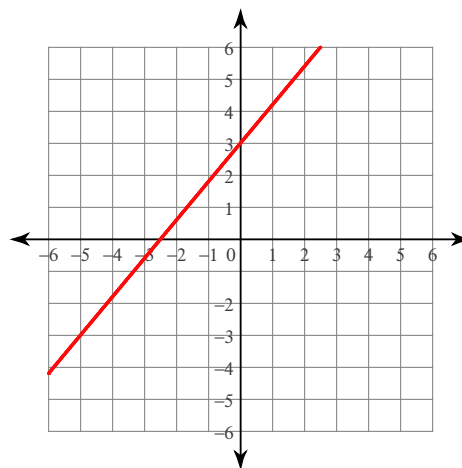
186) $y = \frac{1}{3}x + 2$



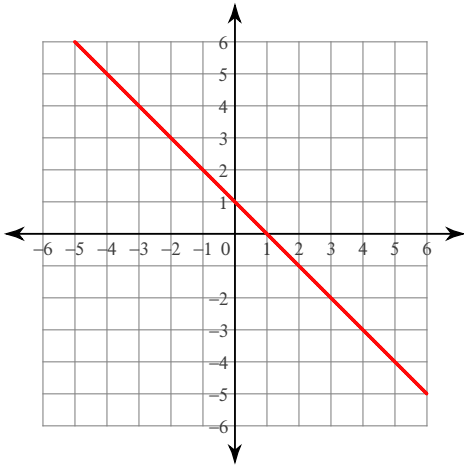
187) $y = \frac{1}{2}x + 5$



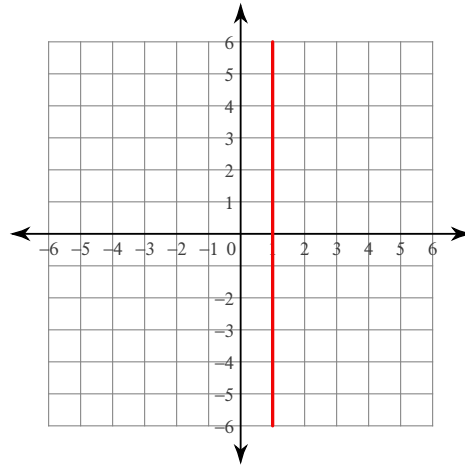
188) $y = \frac{6}{5}x + 3$



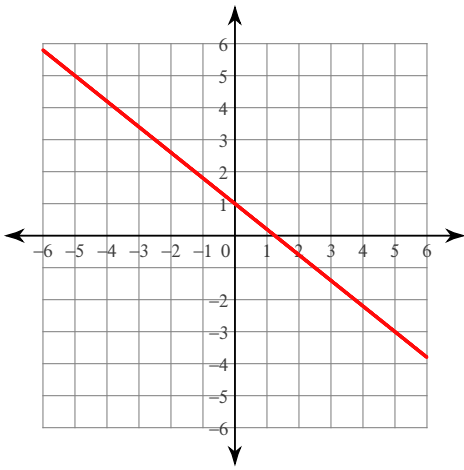
189) $y = -x + 1$



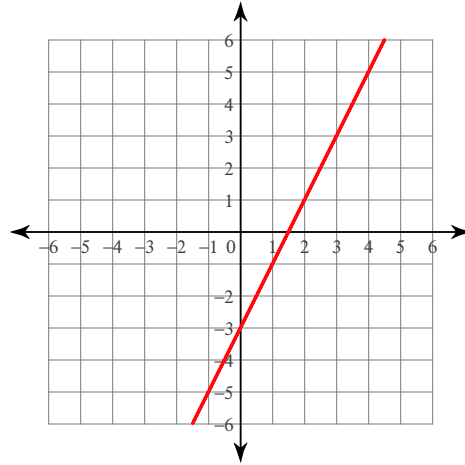
190) $x = 1$



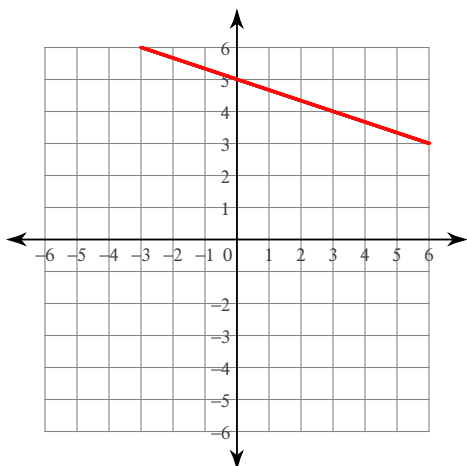
191) $y = -\frac{4}{5}x + 1$



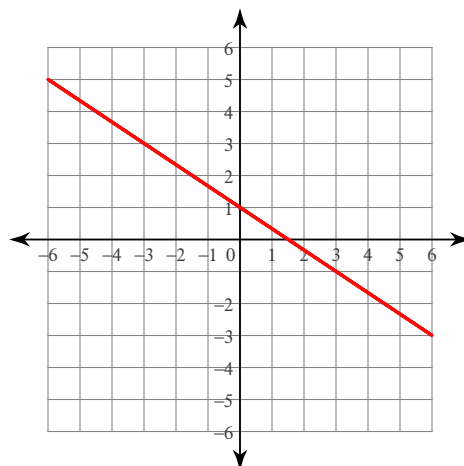
192) $y = 2x - 3$



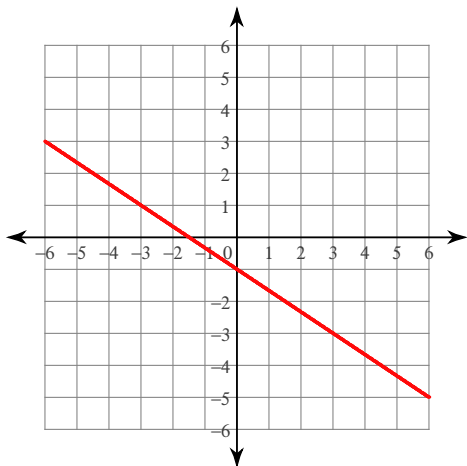
193) $y = -\frac{1}{3}x + 5$



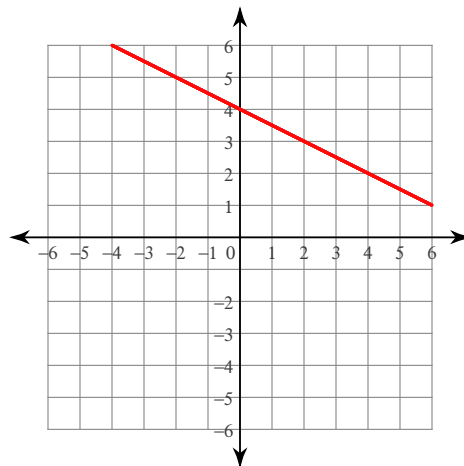
194) $y = -\frac{2}{3}x + 1$



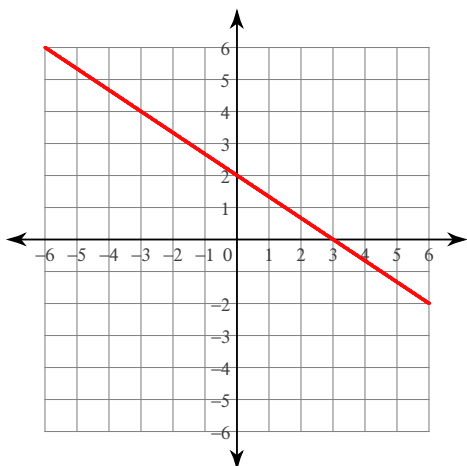
195) $y = -\frac{2}{3}x - 1$



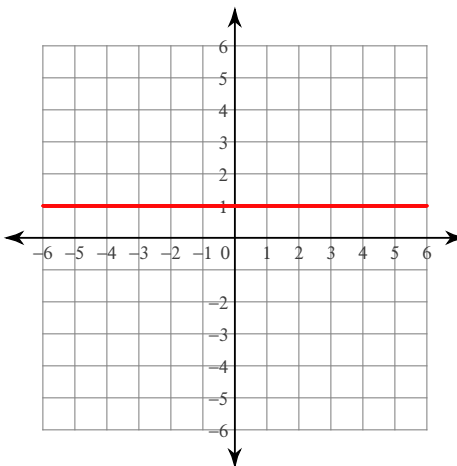
196) $y = -\frac{1}{2}x + 4$



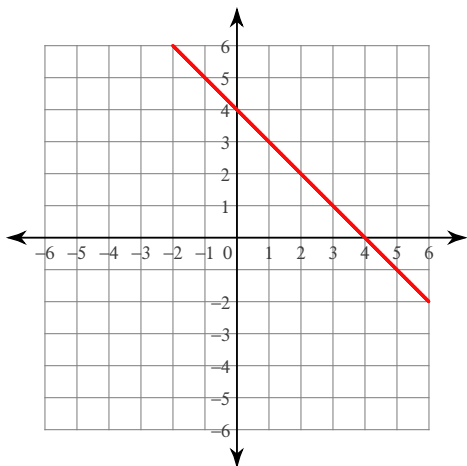
197) $y = -\frac{2}{3}x + 2$



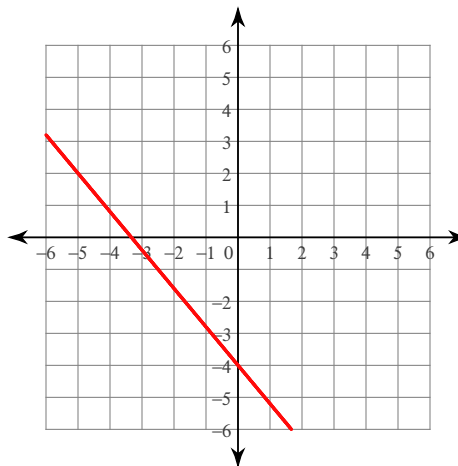
198) $y = 1$



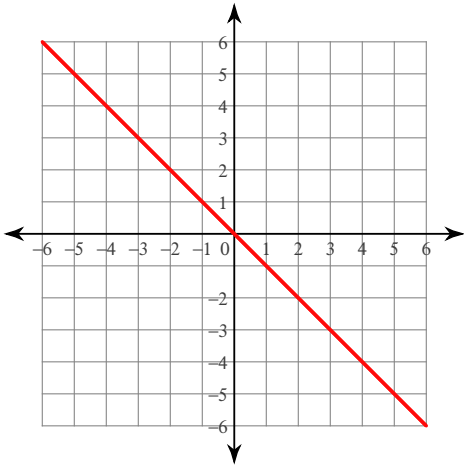
199) $y = -x + 4$



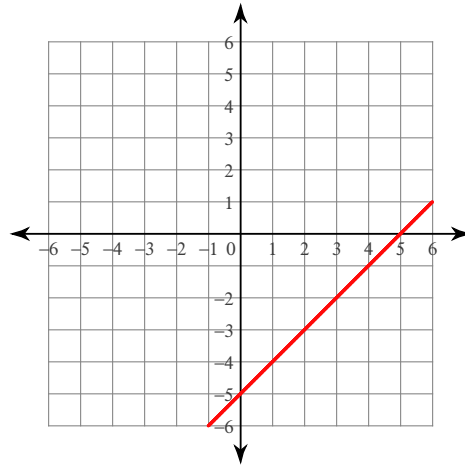
200) $y = -\frac{6}{5}x - 4$



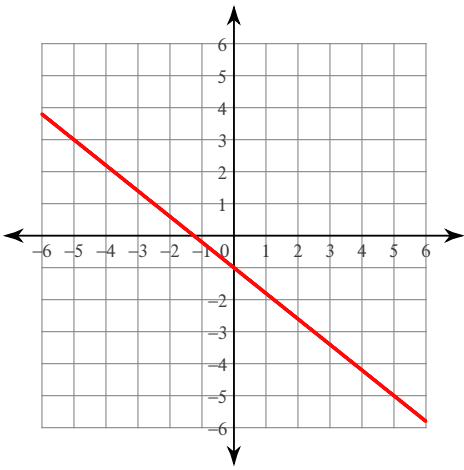
201) $y = -x$



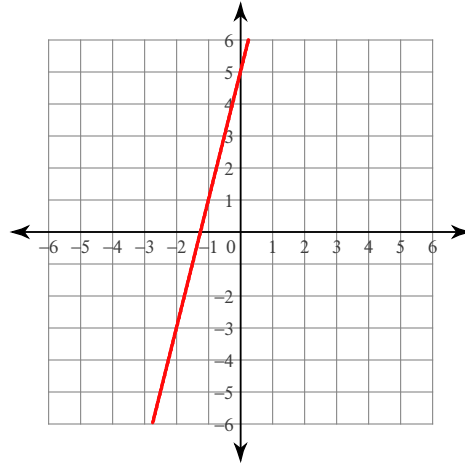
202) $y = x - 5$



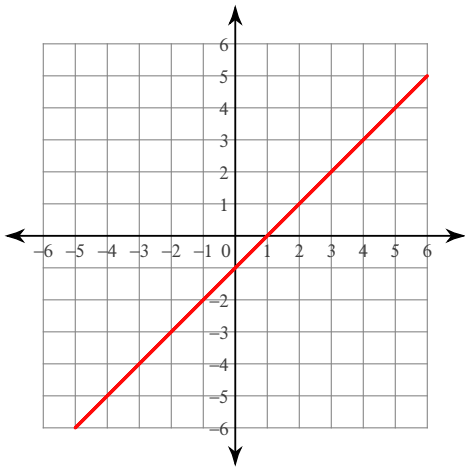
203) $y = -\frac{4}{5}x - 1$



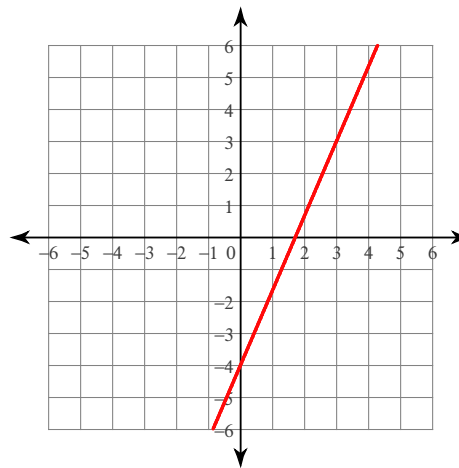
204) $y = 4x + 5$



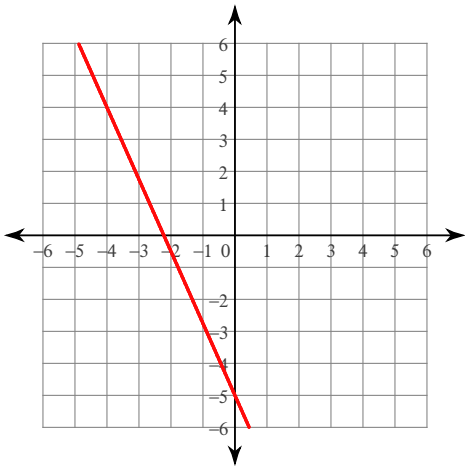
205) $y = x - 1$



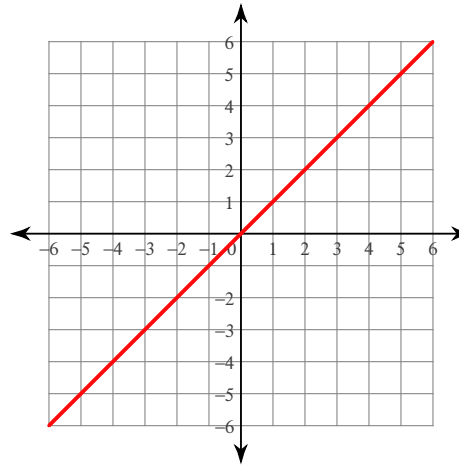
206) $y = \frac{7}{3}x - 4$



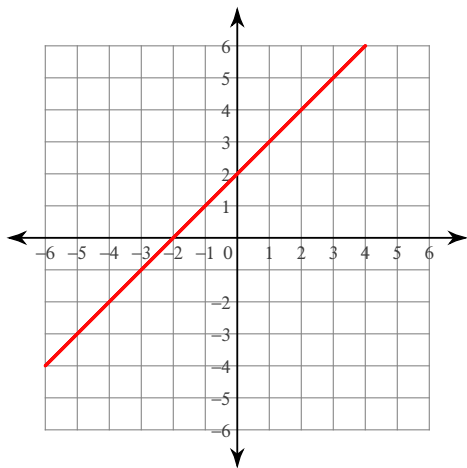
207) $y = -\frac{9}{4}x - 5$



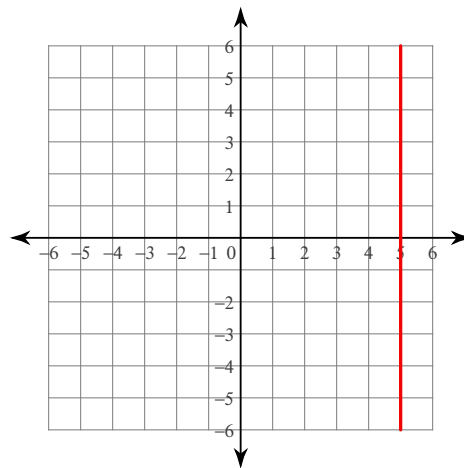
208) $y = x$



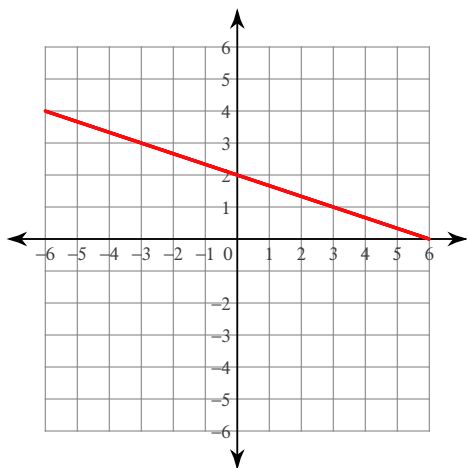
209) $y = x + 2$



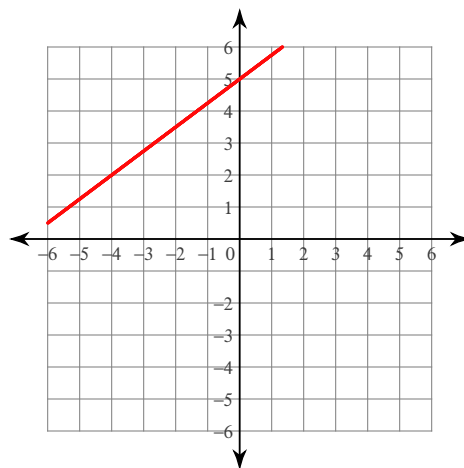
210) $x = 5$



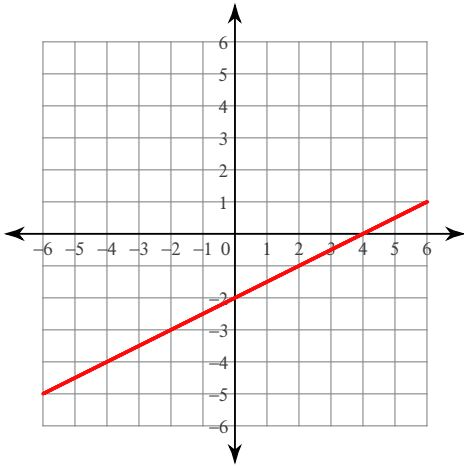
211) $6 = x + 3y$



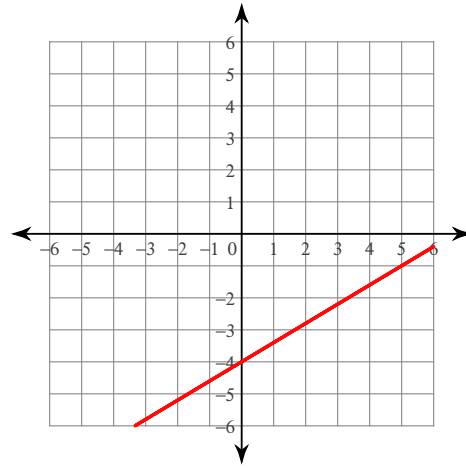
212) $-4y + 3x = -20$



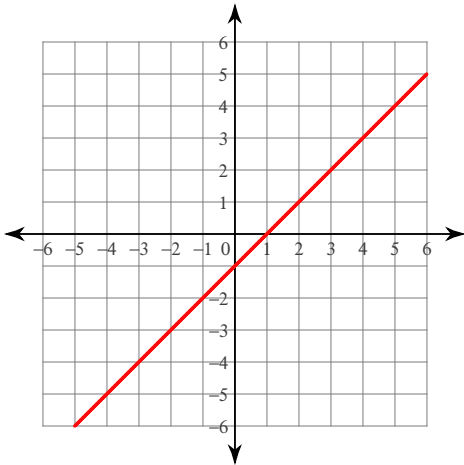
213) $-2y + x = 4$



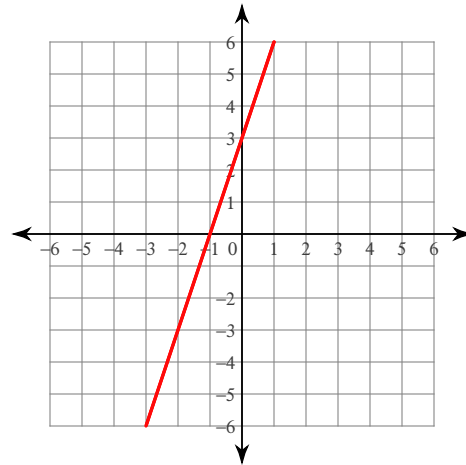
214) $-5y - 20 = -3x$



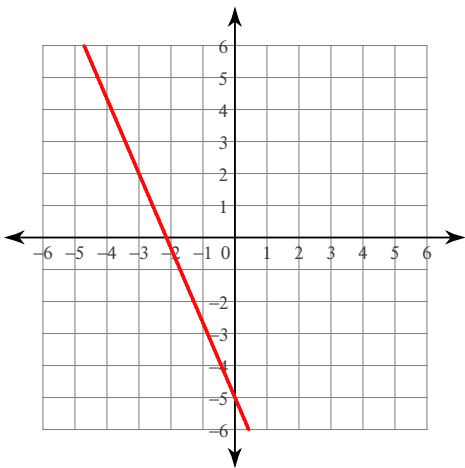
215) $y + 1 - x = 0$



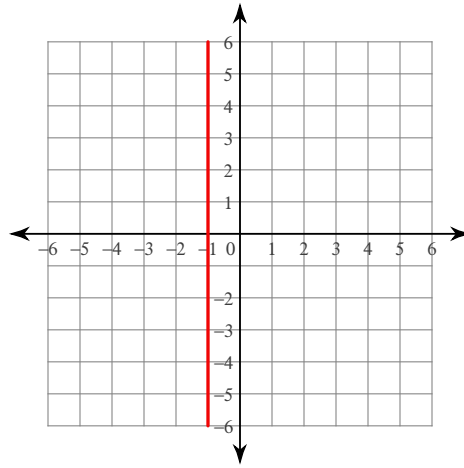
216) $-3 = 3x - y$



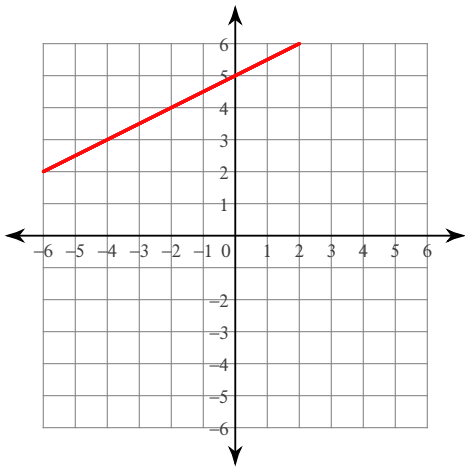
$$217) -1 - \frac{7}{15}x = \frac{1}{5}y$$



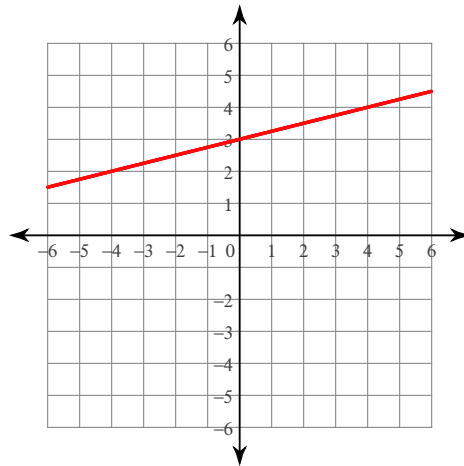
$$218) -2x - 2 = 0$$



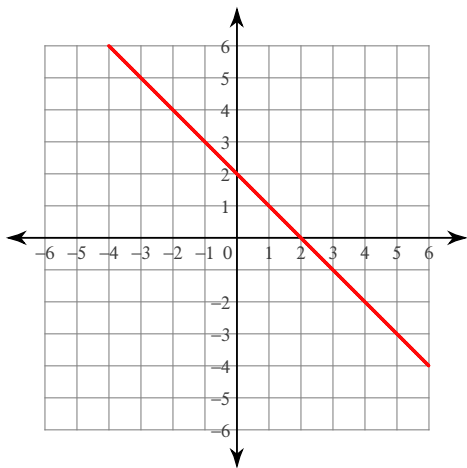
$$219) 6y - 30 = 3x$$



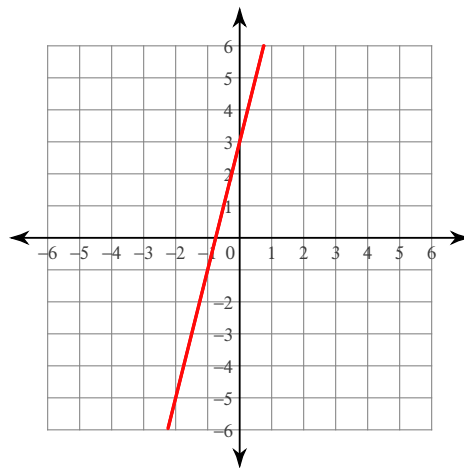
$$220) -1 - \frac{1}{12}x = -\frac{1}{3}y$$



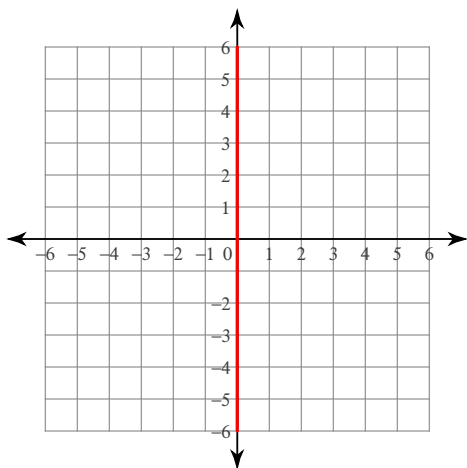
221) $y = -x + 2$



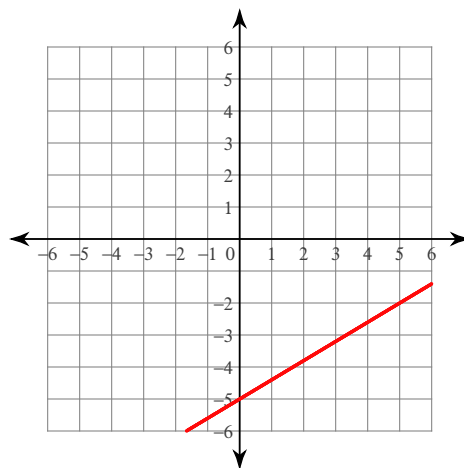
222) $-y = -3 - 4x$



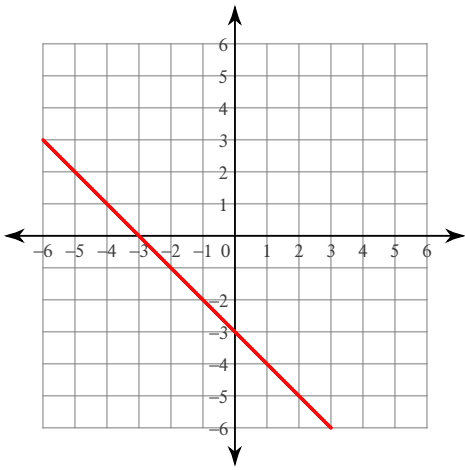
223) $0 = -2x$



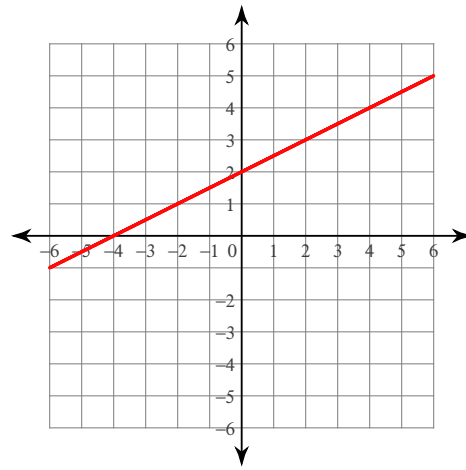
224) $-3x + 5y + 25 = 0$



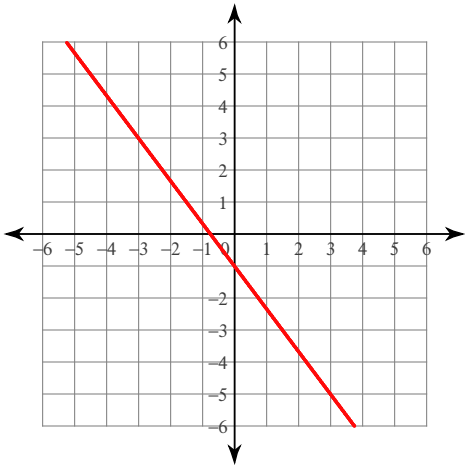
225) $-3 - y = x$



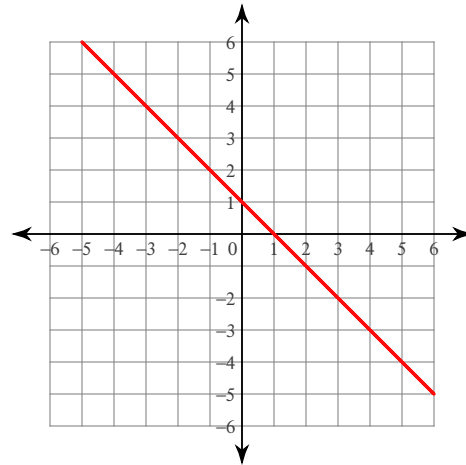
226) $-2x = -4y + 8$



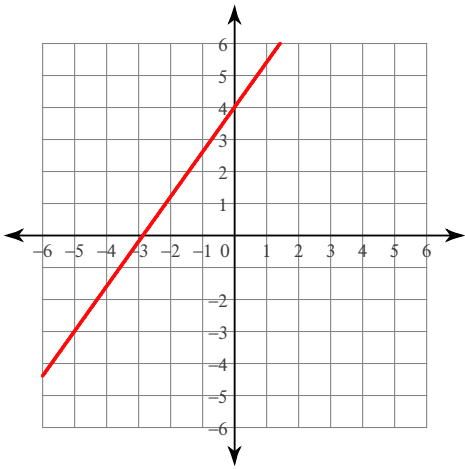
227) $-4x - 3 - 3y = 0$



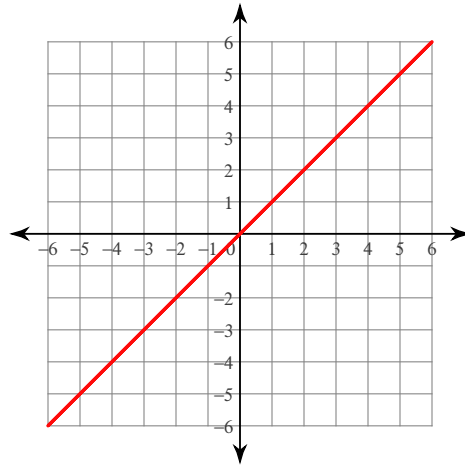
228) $y + x - 1 = 0$



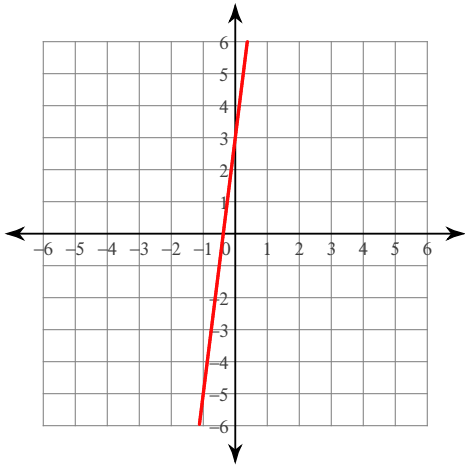
$$229) -1 - \frac{7}{20}x = -\frac{1}{4}y$$



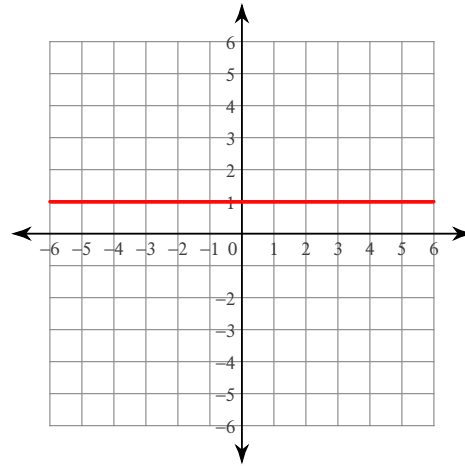
$$230) -y + x = 0$$



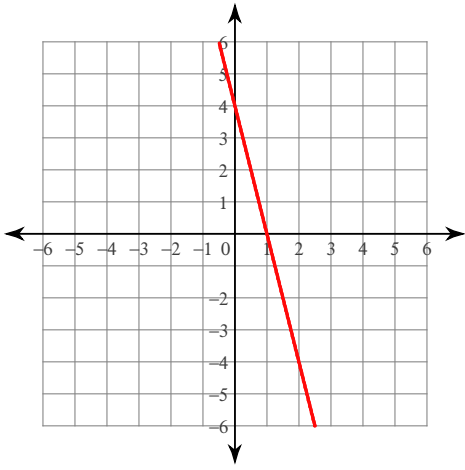
$$231) 3 + 8x = y$$



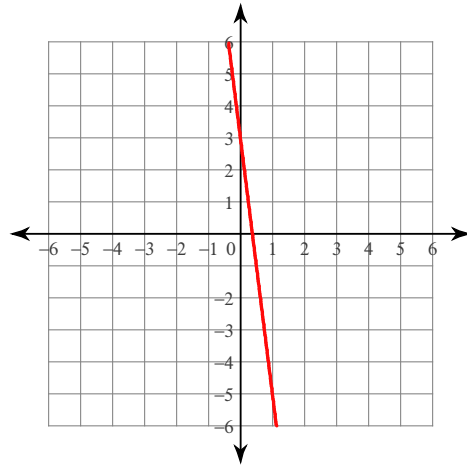
$$232) -1 + y = 0$$



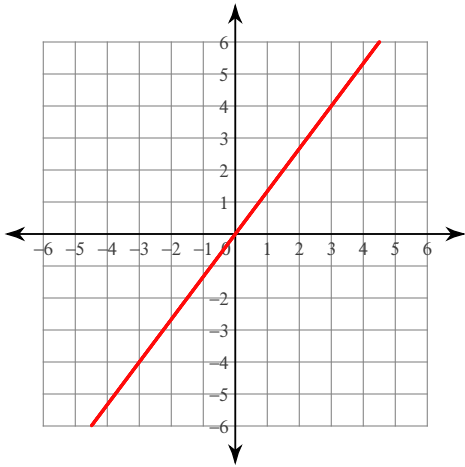
233) $y - 4 = -4x$



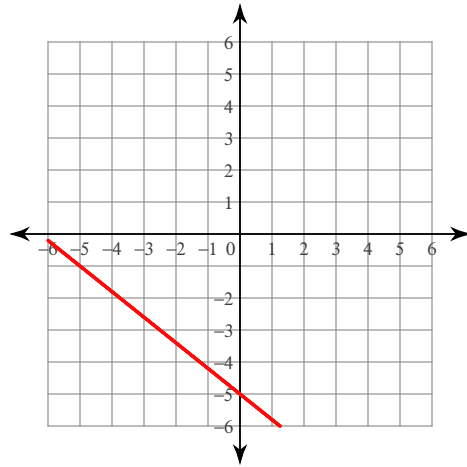
234) $3 - y = 8x$



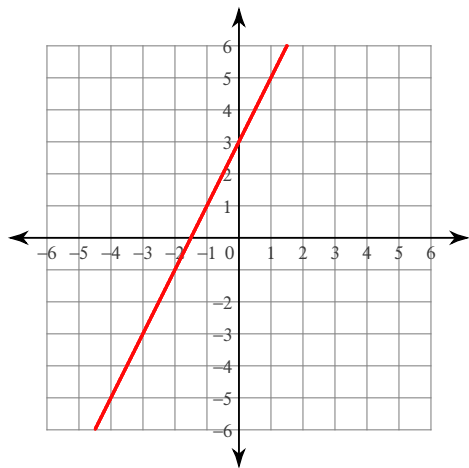
235) $3y - 4x = 0$



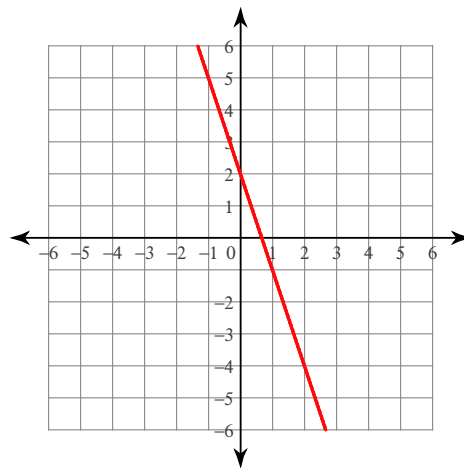
236) $4x + 25 = -5y$



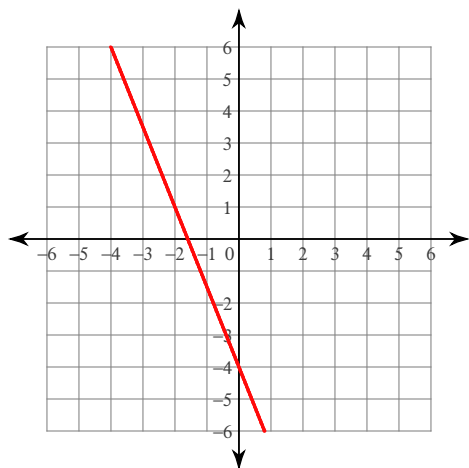
237) $-9 + 3y = 6x$



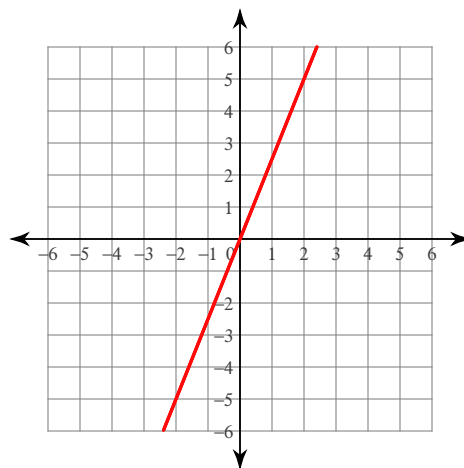
238) $2 - 3x = y$



239) $8 + 5x = -2y$



240) $-10x = -4y$



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

241) Slope = 0, y-intercept = -4

$y = -4$

242) Slope = 5, y-intercept = -5

$y = 5x - 5$

243) Slope = $-\frac{1}{2}$, y-intercept = -4 $y = -\frac{1}{2}x - 4$

244) Slope = 2, y-intercept = -5

$y = 2x - 5$

245) Slope = 3, y-intercept = -4

$$y = 3x - 4$$

247) Slope = -3, y-intercept = -3

$$y = -3x - 3$$

249) Slope = 0, y-intercept = 2

$$y = 2$$

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

$$y = -3$$

253) Slope = -1, y-intercept = 3

$$y = -x + 3$$

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

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

259) Slope = -2, y-intercept = 4

$$y = -2x + 4$$

261) Slope = -2, y-intercept = -4

$$y = -2x - 4$$

263) Slope = -2, y-intercept = 1

$$y = -2x + 1$$

265) Slope = 1, y-intercept = -1

$$y = x - 1$$

267) Slope = $\frac{7}{4}$, y-intercept = 5 $y = \frac{7}{4}x + 5$

269) Slope = 3, y-intercept = 2

$$y = 3x + 2$$

246) Slope = 5, y-intercept = 2

$$y = 5x + 2$$

248) Slope = 1, y-intercept = -4

$$y = x - 4$$

250) Slope = $-\frac{1}{5}$, y-intercept = -2 $y = -\frac{1}{5}x - 2$

252) Slope = $\frac{4}{3}$, y-intercept = 1 $y = \frac{4}{3}x + 1$

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

256) Slope = $\frac{7}{2}$, y-intercept = 5 $y = \frac{7}{2}x + 5$

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

260) Slope = $-\frac{9}{5}$, y-intercept = -5 $y = -\frac{9}{5}x - 5$

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

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

266) Slope = $\frac{1}{2}$, y-intercept = 4 $y = \frac{1}{2}x + 4$

268) Slope = -1, y-intercept = 0

$$y = -x$$

270) Slope = 4, y-intercept = 5

$$y = 4x + 5$$

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

271) through: $(-1, -4)$, slope = $\frac{1}{3}$ $y = \frac{1}{3}x - \frac{11}{3}$

272) through: $(3, 4)$, slope = $\frac{1}{3}$ $y = \frac{1}{3}x + 3$

273) through: $(5, -5)$, slope = $-\frac{4}{5}$ $y = -\frac{4}{5}x - 1$

274) through: $(-3, 1)$, slope = -2
 $y = -2x - 5$

275) through: $(1, 0)$, slope = 1
 $y = x - 1$

276) through: $(-5, 0)$, slope = -1
 $y = -x - 5$

277) through: $(-2, 0)$, slope = $-\frac{4}{7}$ $y = -\frac{4}{7}x - \frac{8}{7}$

278) through: $(-2, -5)$, slope = 3
 $y = 3x + 1$

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

280) through: $(3, 0)$, slope = $\frac{5}{3}$ $y = \frac{5}{3}x - 5$

281) through: $(-3, 2)$, slope = -2
 $y = -2x - 4$

282) through: $(-1, -4)$, slope = $-\frac{1}{4}$ $y = -\frac{1}{4}x - \frac{17}{4}$

283) through: $(-5, 0)$, slope = $\frac{3}{5}$ $y = \frac{3}{5}x + 3$

284) through: $(2, 0)$, slope = -1
 $y = -x + 2$

285) through: $(4, 1)$, slope = $\frac{3}{2}$ $y = \frac{3}{2}x - 5$

286) through: $(1, -2)$, slope = 2
 $y = 2x - 4$

287) through: $(0, -3)$, slope = $\frac{7}{5}$ $y = \frac{7}{5}x - 3$

288) through: $(3, -4)$, slope = $-\frac{8}{3}$ $y = -\frac{8}{3}x + 4$

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

290) through: $(-1, -3)$, slope = undefined
 $x = -1$

291) through: $(5, -1)$, slope = undefined
 $x = 5$

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

293) through: $(1, 1)$, slope = 3
 $y = 3x - 2$

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

295) through: $(-1, 4)$, slope = -9
 $y = -9x - 5$

296) through: $(1, -3)$, slope = 0
 $y = -3$

297) through: $(-1, -4)$, slope = 1
 $y = x - 3$

298) through: $(-5, -3)$, slope = $\frac{6}{5}$ $y = \frac{6}{5}x + 3$

299) through: $(3, -5)$, slope = -2
 $y = -2x + 1$

300) through: $(3, -3)$, slope = $-\frac{7}{3}$ $y = -\frac{7}{3}x + 4$

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

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

$$3x - y = -2$$

302) through: $(4, 4)$, perp. to $y = -\frac{4}{9}x + 5$

$$9x - 4y = 20$$

303) through: $(-1, -4)$, perp. to $y = 5$

$$x = -1$$

304) through: $(-4, 5)$, perp. to $y = \frac{1}{2}x - 5$

$$2x + y = -3$$

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

$$5x - 2y = 19$$

306) through: $(-2, 3)$, perp. to $y = 2x - 4$

$$x + 2y = 4$$

307) through: $(-4, -4)$, perp. to $x = 0$

$$y = -4$$

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

$$5x - y = 2$$

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

$$4x + y = 2$$

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

$$5x + 4y = 8$$

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

$$4x - 3y = 0$$

312) through: $(4, 1)$, perp. to $y = -\frac{2}{3}x - 5$

$$3x - 2y = 10$$

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

$$x - y = 3$$

314) through: $(-5, 1)$, perp. to $y = x + 3$

$$x + y = -4$$

315) through: $(3, -2)$, perp. to $y = 2x - 5$

$$x + 2y = -1$$

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

$$4x - 5y = 25$$

317) through: $(2, -5)$, perp. to $x = 0$

$$y = -5$$

318) through: $(-3, 0)$, perp. to $y = -3x - 4$

$$x - 3y = -3$$

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

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

320) through: $(-3, -1)$, perp. to $y = \frac{7}{4}x - 5$

$$4x + 7y = -19$$

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

$$2x - 5y = 10$$

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

$$x + y = -1$$

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

$$4x + y = -3$$

325) through: $(3, -2)$, perp. to $y = \frac{3}{7}x + 2$

$$7x + 3y = 15$$

327) through: $(-3, 4)$, perp. to $y = x - 3$

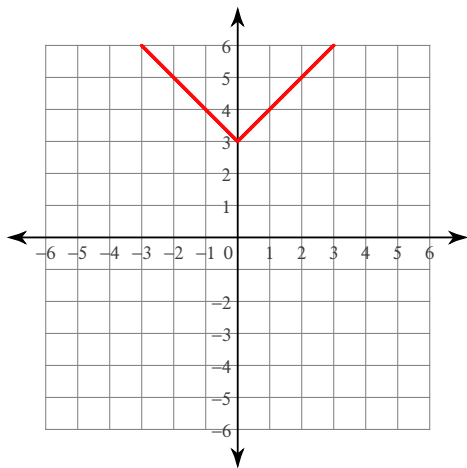
$$x + y = 1$$

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

$$4x - y = -12$$

Graph each equation.

331) $y = |x| + 3$



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

$$2x - y = 1$$

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

$$3x - 2y = -10$$

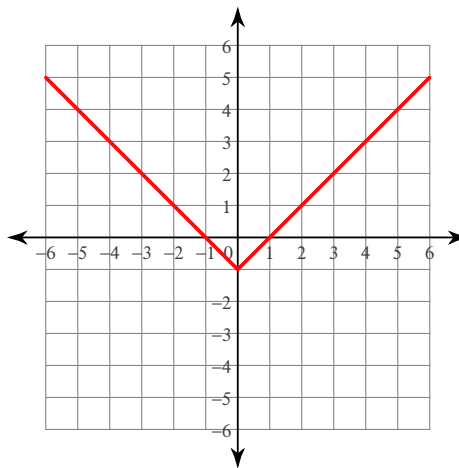
328) through: $(2, -1)$, perp. to $y = \frac{2}{3}x - 2$

$$3x + 2y = 4$$

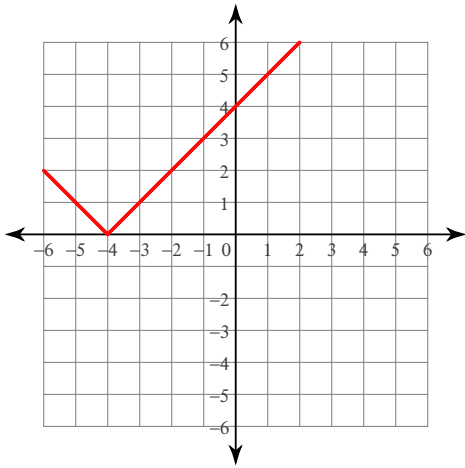
330) through: $(3, 5)$, perp. to $y = -3x + 1$

$$x - 3y = -12$$

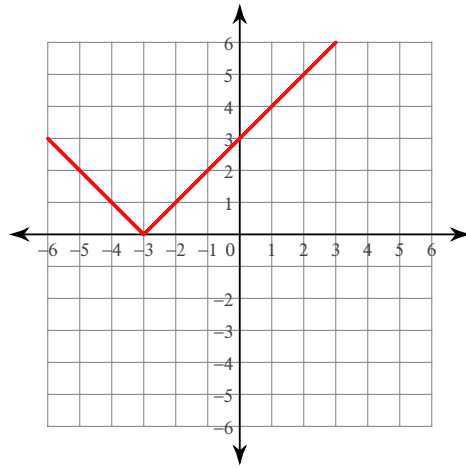
332) $y = |x| - 1$



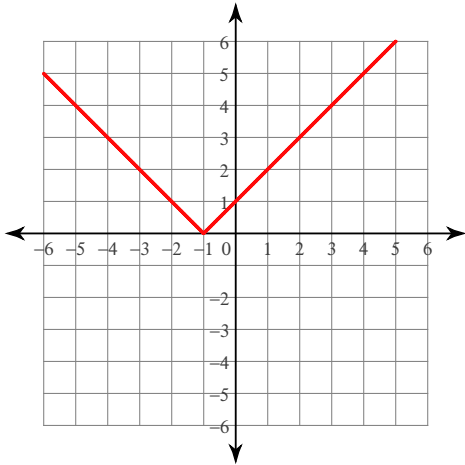
$$333) y = |x + 4|$$



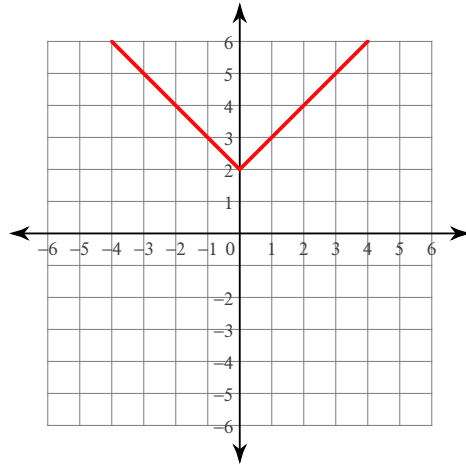
$$334) y = |x + 3|$$



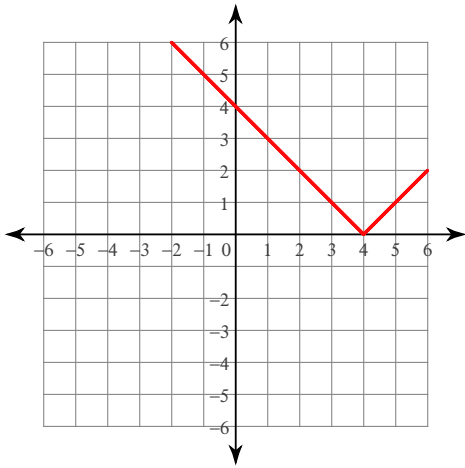
$$335) y = |x + 1|$$



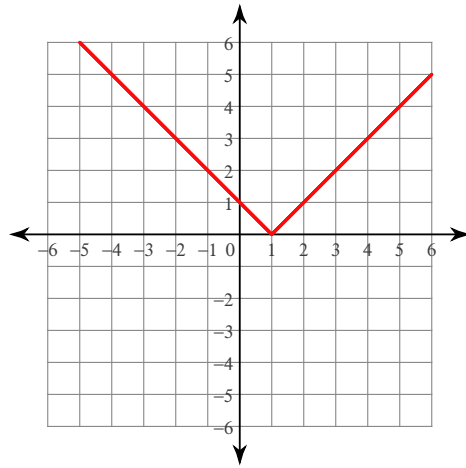
$$336) y = |x| + 2$$



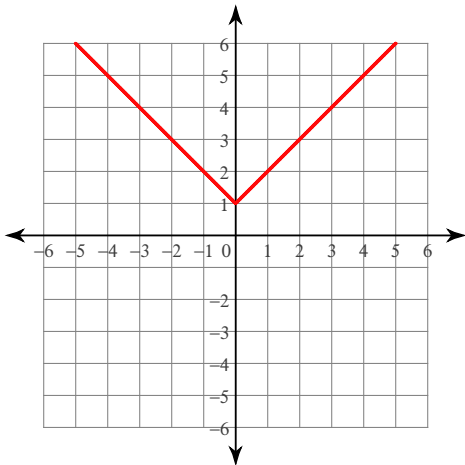
$$337) y = |x - 4|$$



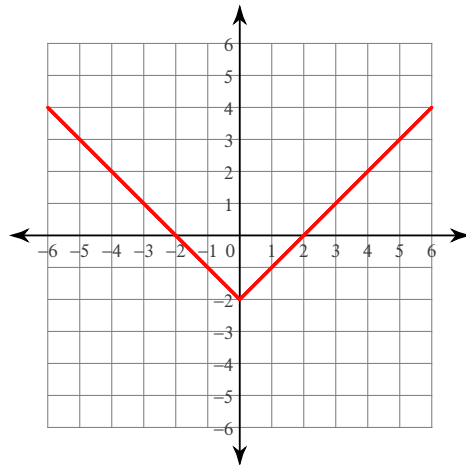
$$338) y = |x - 1|$$



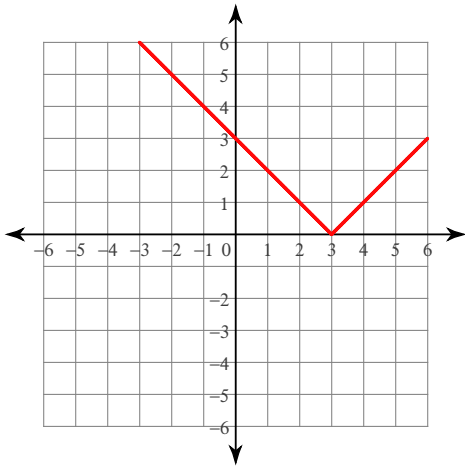
$$339) y = |x| + 1$$



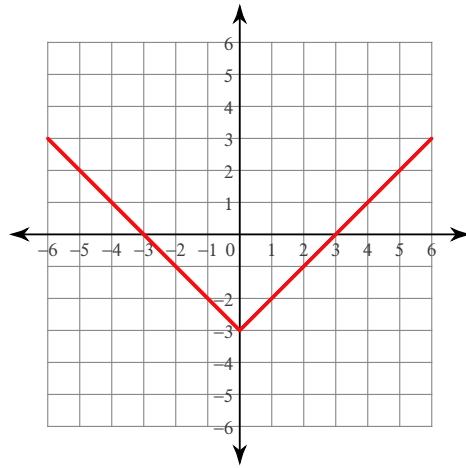
$$340) y = |x| - 2$$



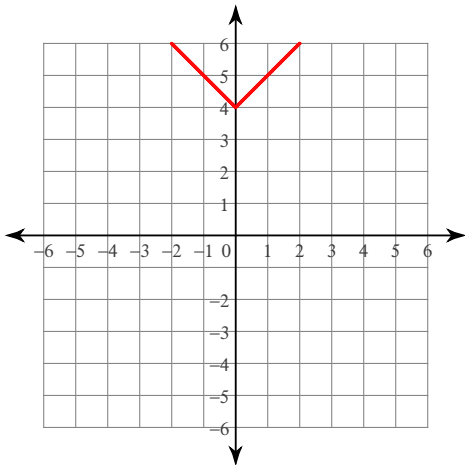
$$341) y = |x - 3|$$



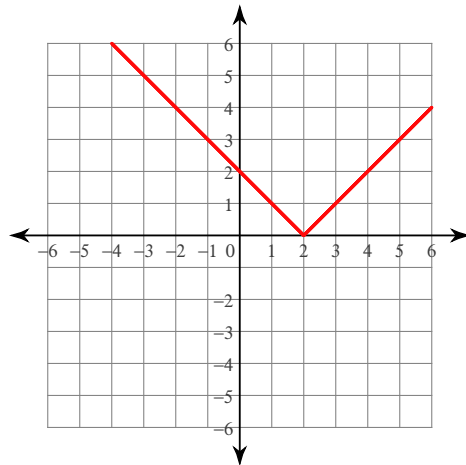
$$342) y = |x| - 3$$



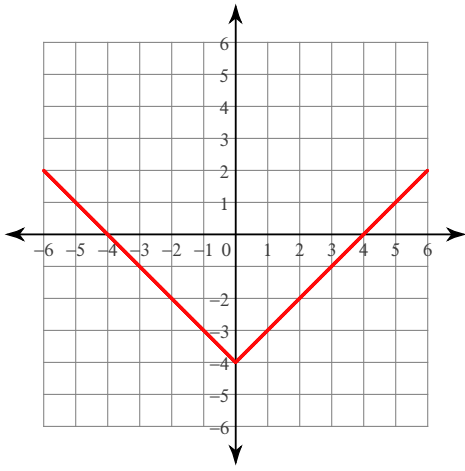
$$343) y = |x| + 4$$



$$344) y = |x - 2|$$



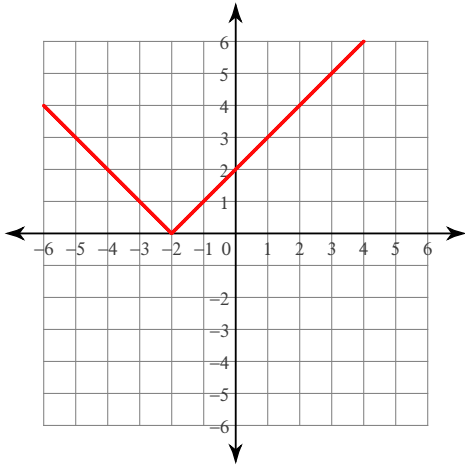
$$345) y = |x| - 4$$



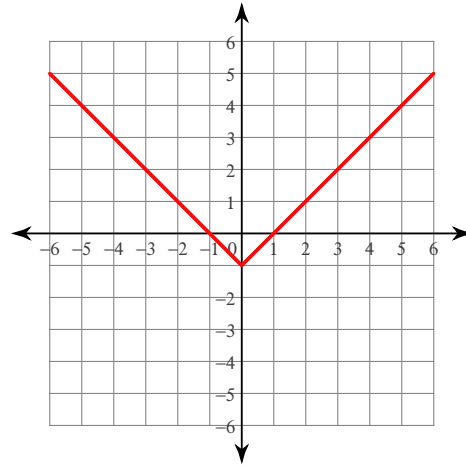
$$346) y = |x + 2|$$



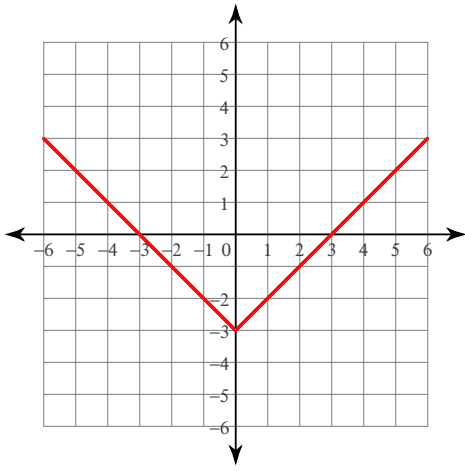
$$347) y = |x + 2|$$



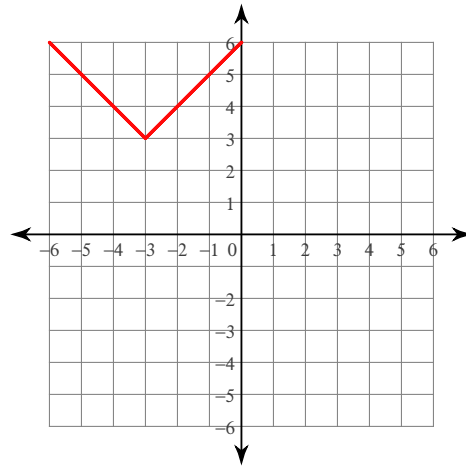
$$348) y = |x| - 1$$



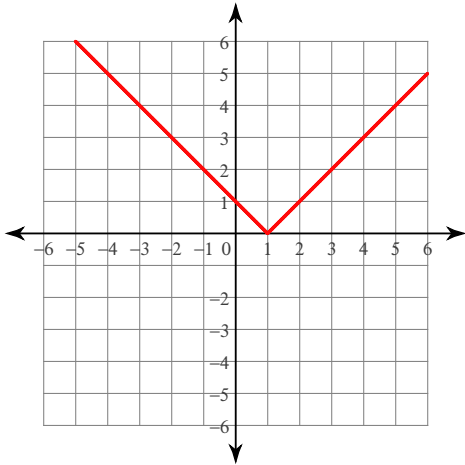
$$349) y = |x| - 3$$



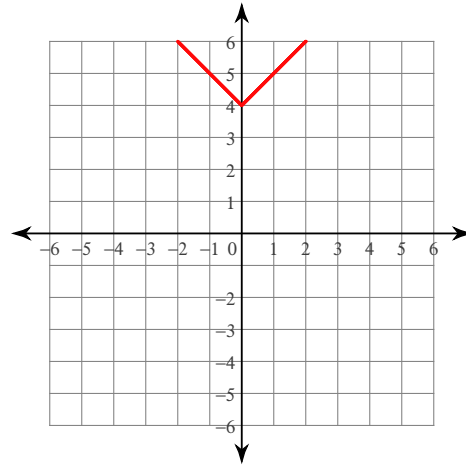
$$350) y = |x + 3| + 3$$



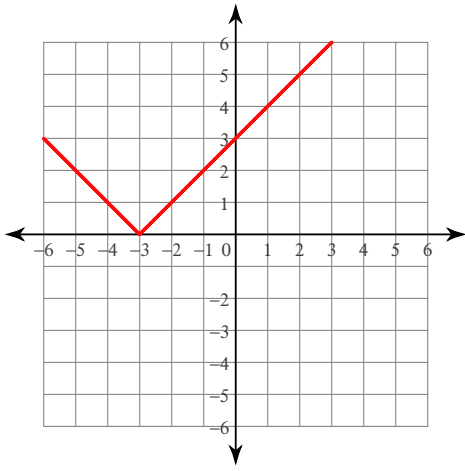
$$351) y = |x - 1|$$



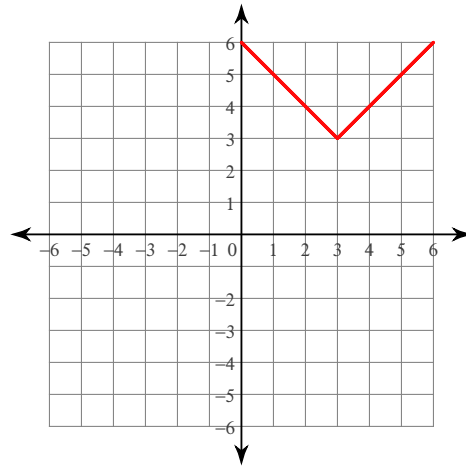
$$352) y = |x| + 4$$



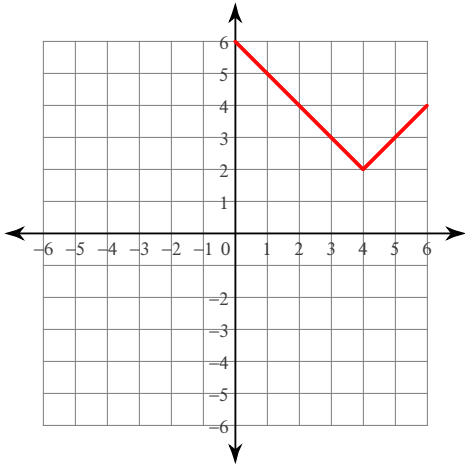
$$353) y = |x + 3|$$



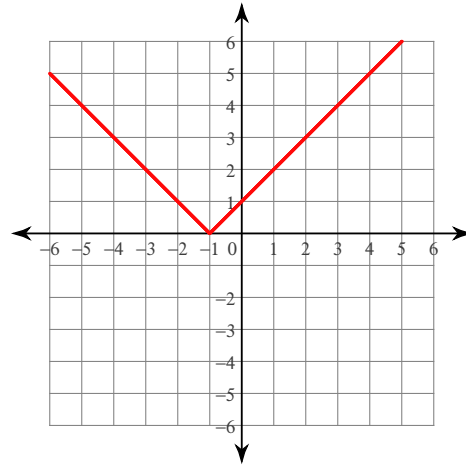
$$354) y = |x - 3| + 3$$



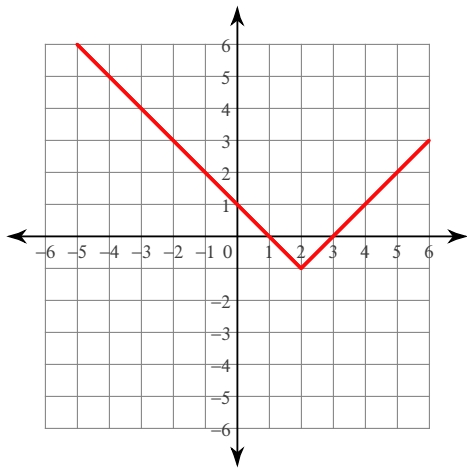
$$355) y = |x - 4| + 2$$



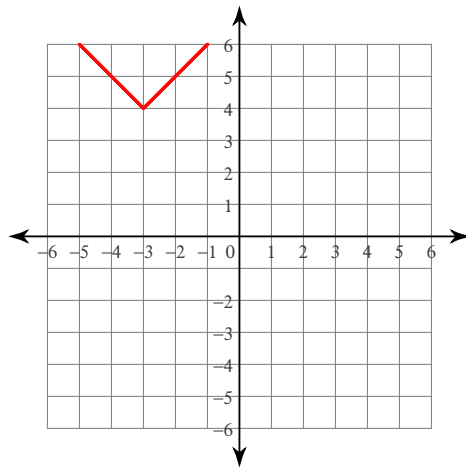
$$356) y = |x + 1|$$



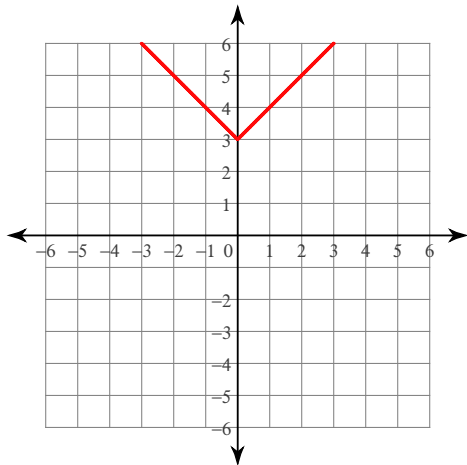
$$357) y = |x - 2| - 1$$



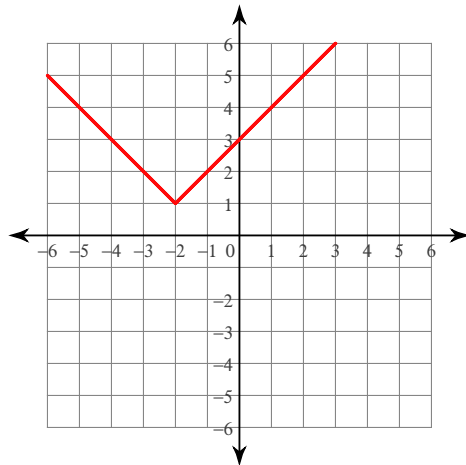
$$358) y = |x + 3| + 4$$



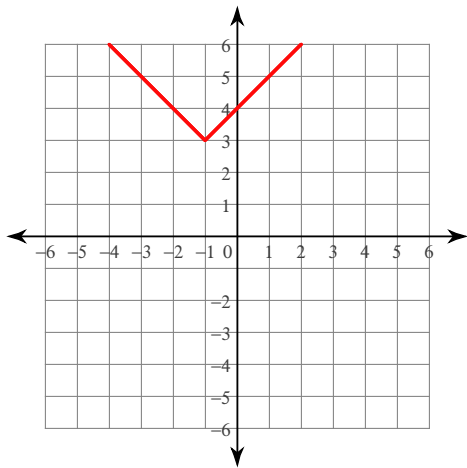
$$359) y = |x| + 3$$



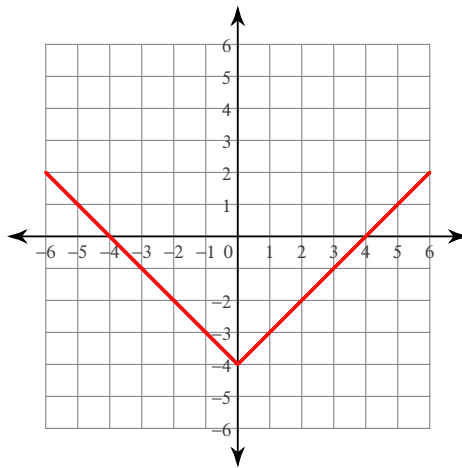
$$360) y = |x + 2| + 1$$



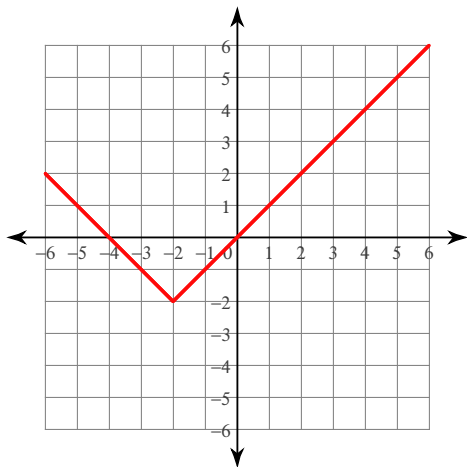
$$361) y = |x + 1| + 3$$



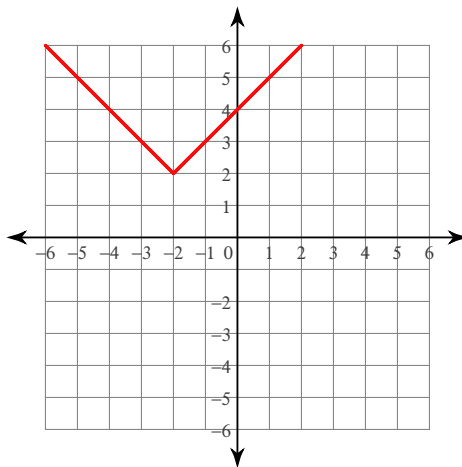
$$362) y = |x| - 4$$



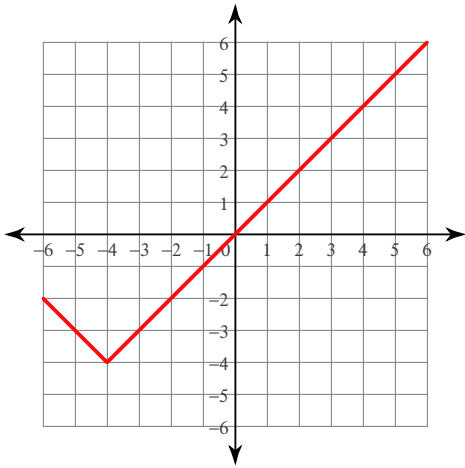
$$363) y = |x + 2| - 2$$



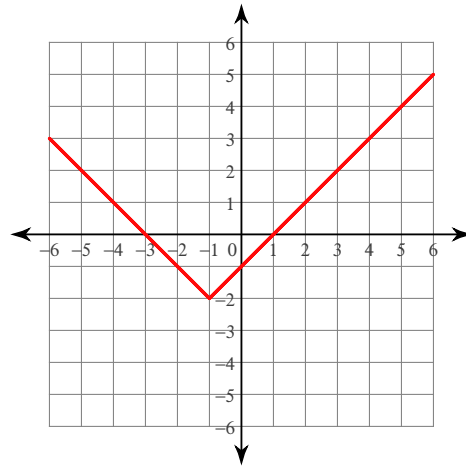
$$364) y = |x + 2| + 2$$



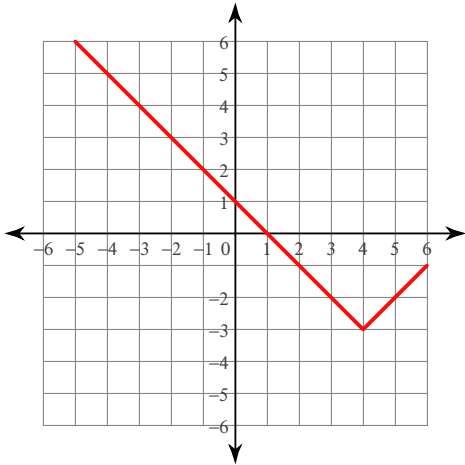
$$365) y = |x + 4| - 4$$



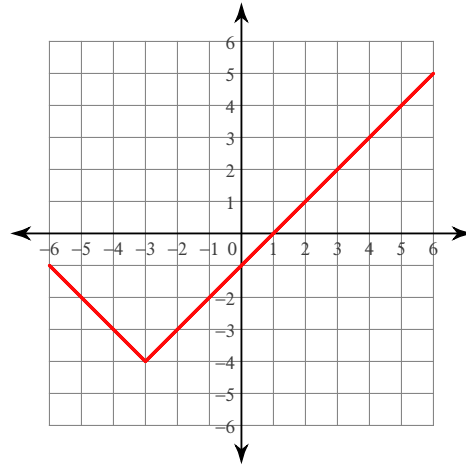
$$366) y = |x + 1| - 2$$



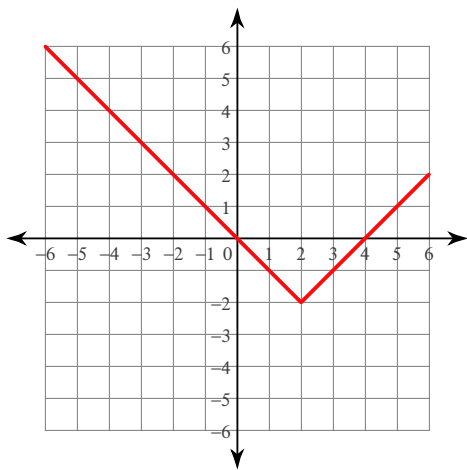
$$367) y = |x - 4| - 3$$



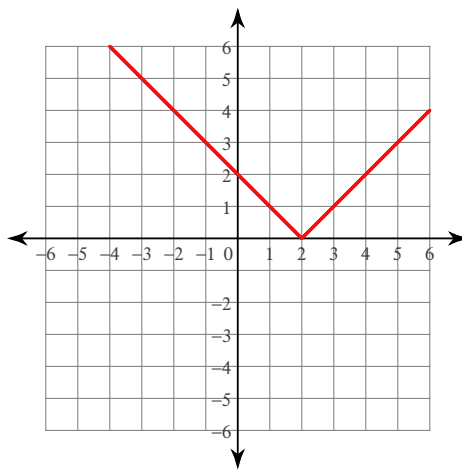
$$368) y = |x + 3| - 4$$



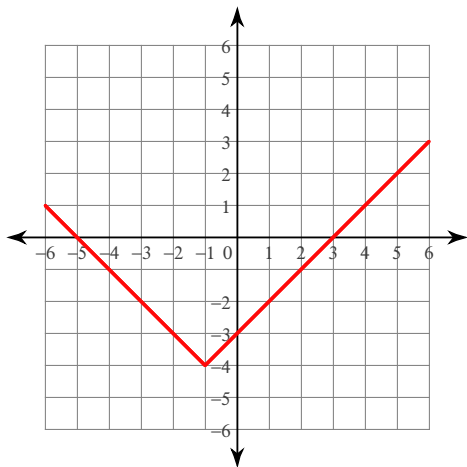
$$369) y = |x - 2| - 2$$



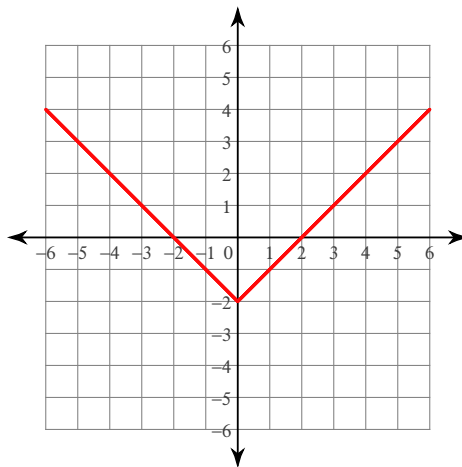
$$370) y = |x - 2|$$



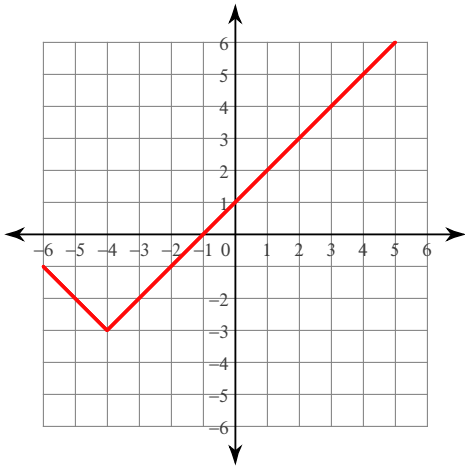
$$371) y = |x + 1| - 4$$



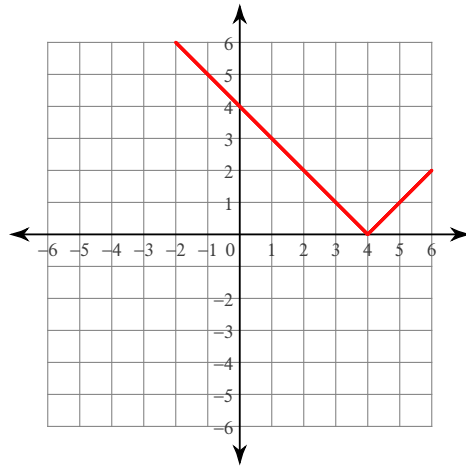
$$372) y = |x| - 2$$



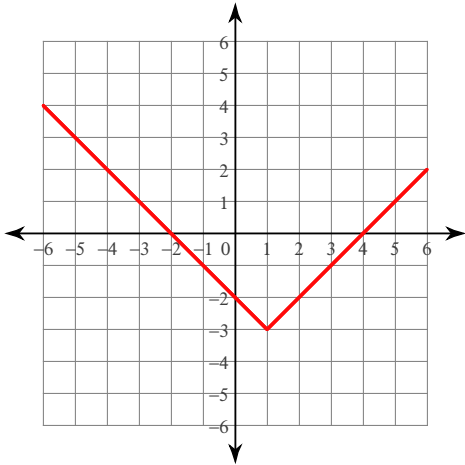
$$373) y = |x + 4| - 3$$



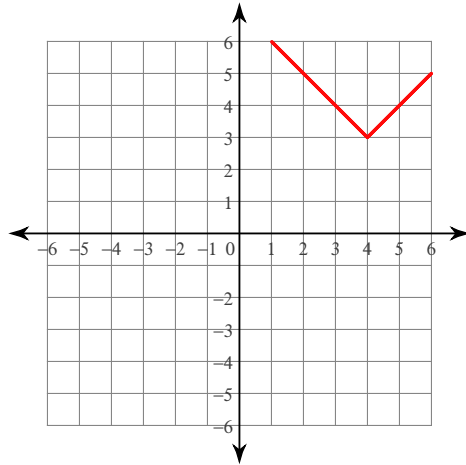
$$374) y = |x - 4|$$



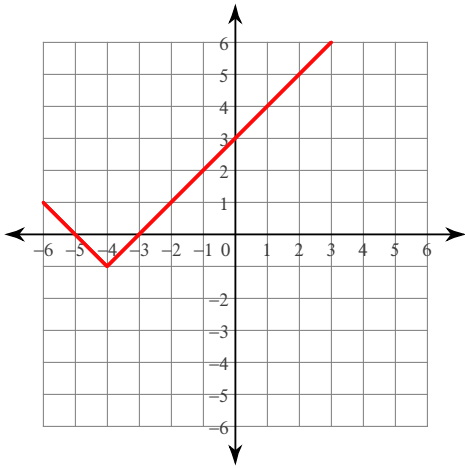
$$375) y = |x - 1| - 3$$



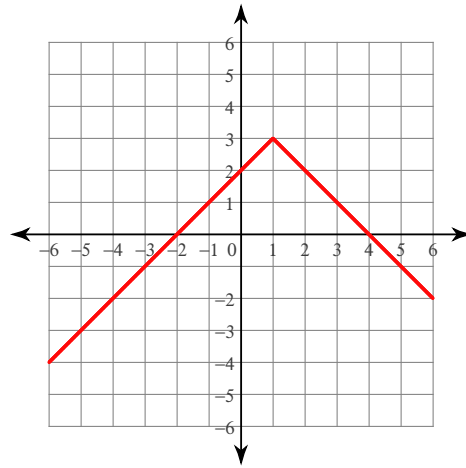
$$376) y = |x - 4| + 3$$



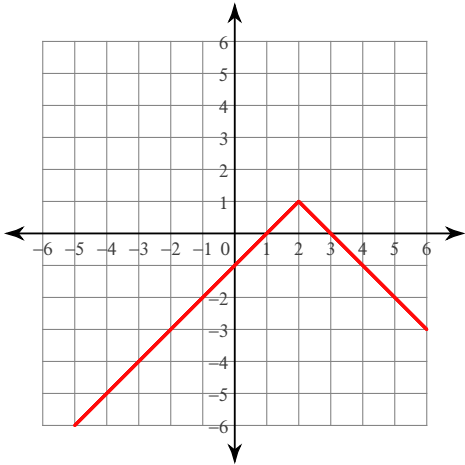
$$377) y = |x + 4| - 1$$



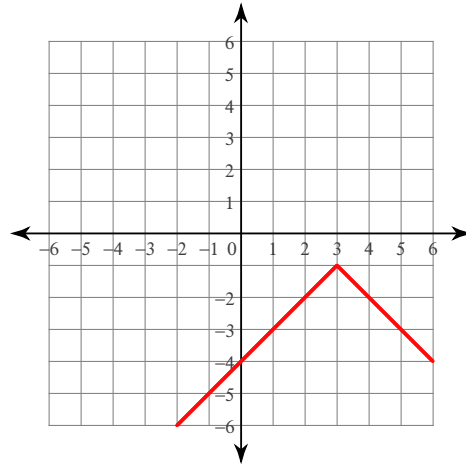
$$378) y = -|x - 1| + 3$$



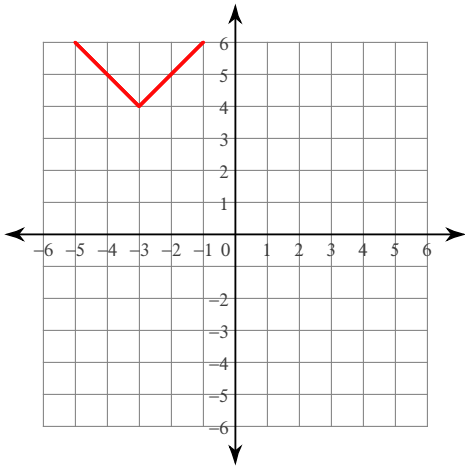
$$379) y = -|x - 2| + 1$$



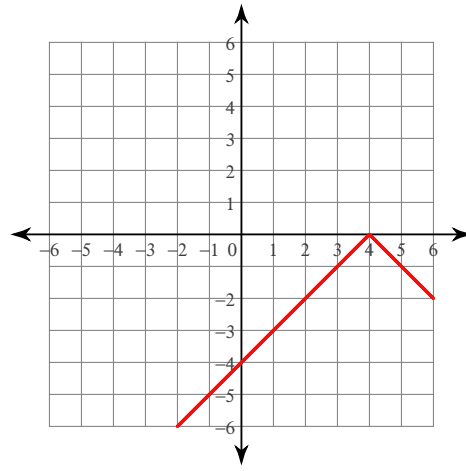
$$380) y = -|x - 3| - 1$$



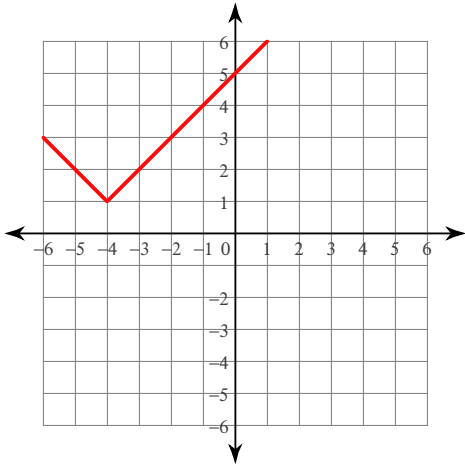
$$381) y = |x + 3| + 4$$



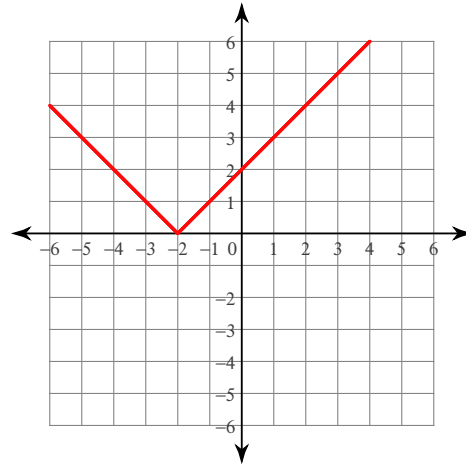
$$382) y = -|x - 4|$$



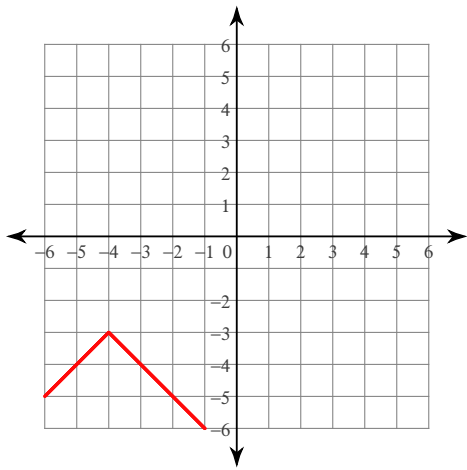
$$383) y = |x + 4| + 1$$



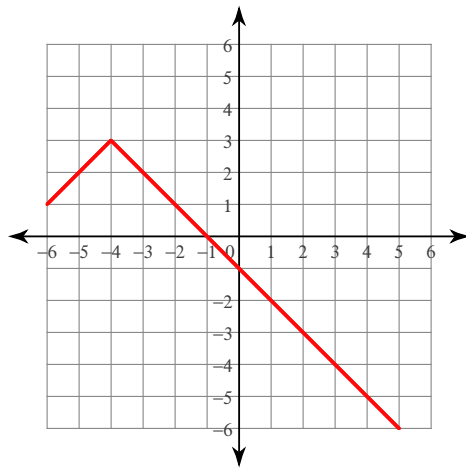
$$384) y = |x + 2|$$



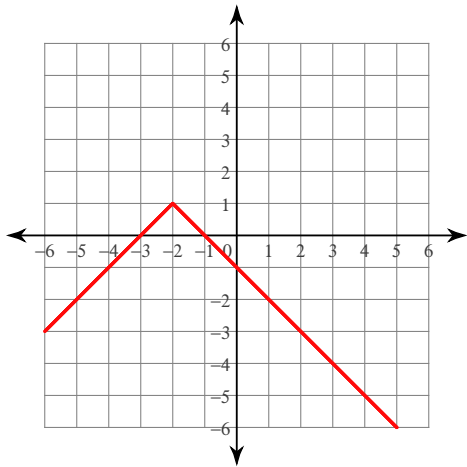
$$385) y = -|x + 4| - 3$$



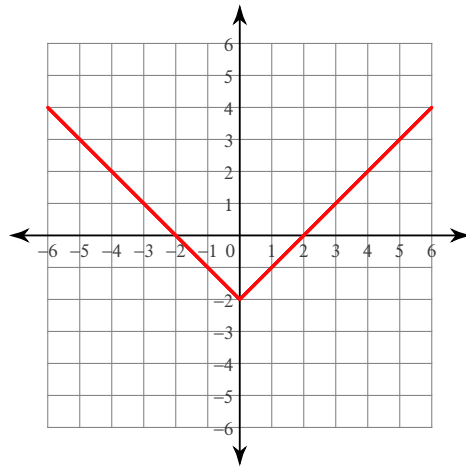
$$386) y = -|x + 4| + 3$$



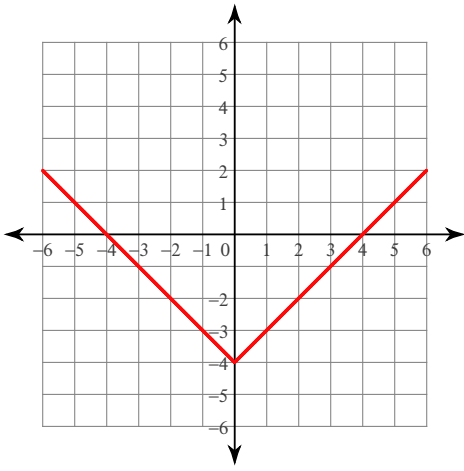
$$387) y = -|x + 2| + 1$$



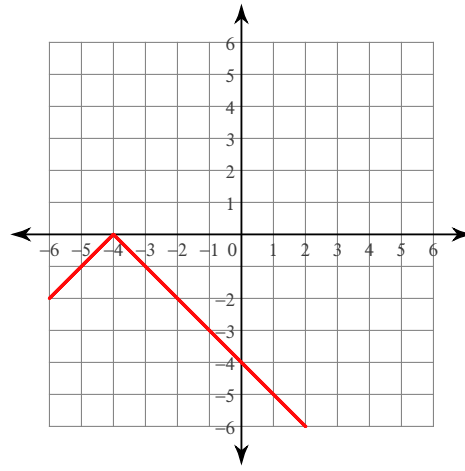
$$388) y = |x| - 2$$



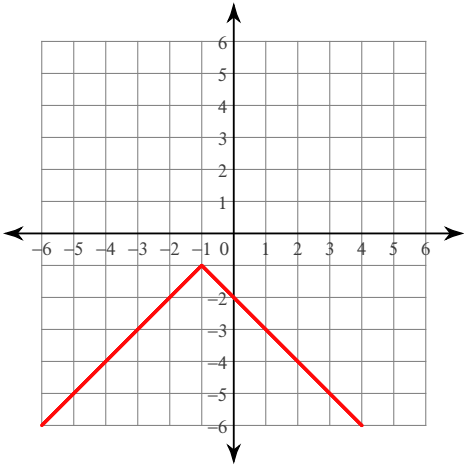
$$389) y = |x| - 4$$



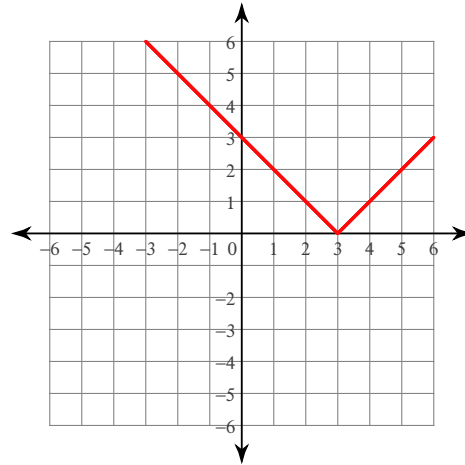
$$390) y = -|x + 4|$$



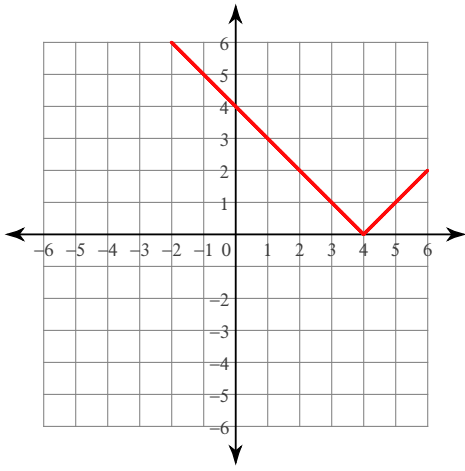
$$391) y = -|x + 1| - 1$$



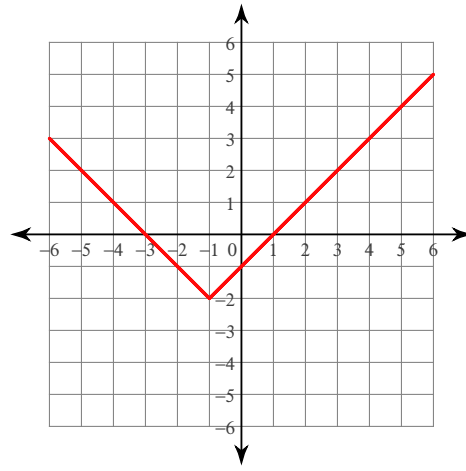
$$392) y = |x - 3|$$



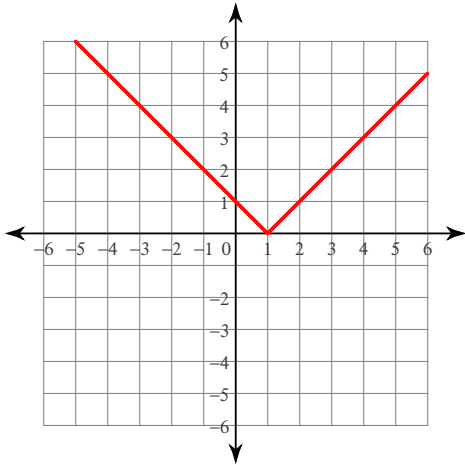
$$393) y = |x - 4|$$



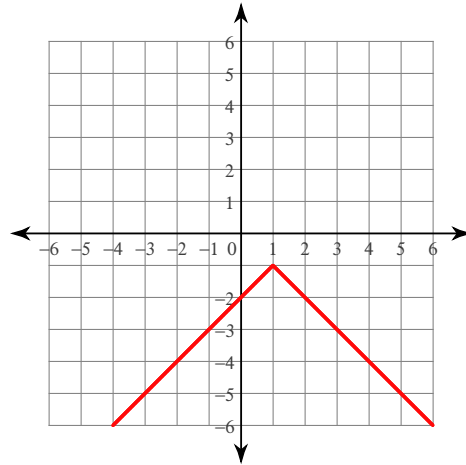
$$394) y = |x + 1| - 2$$



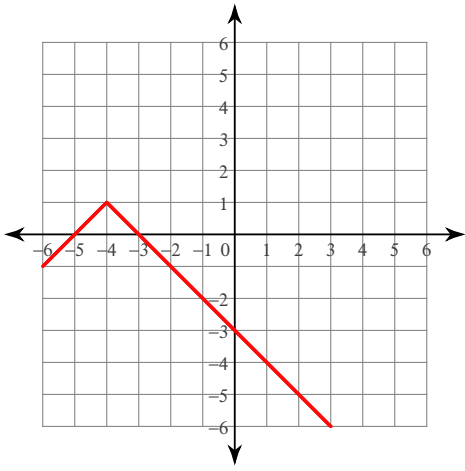
$$395) y = |x - 1|$$



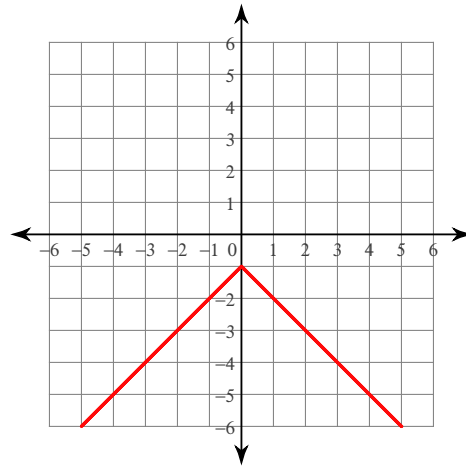
$$396) y = -|x - 1| - 1$$



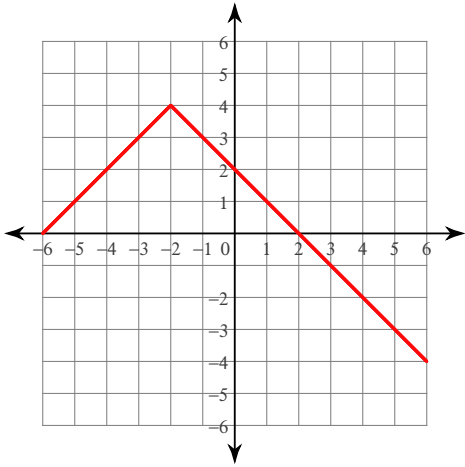
$$397) y = -|x + 4| + 1$$



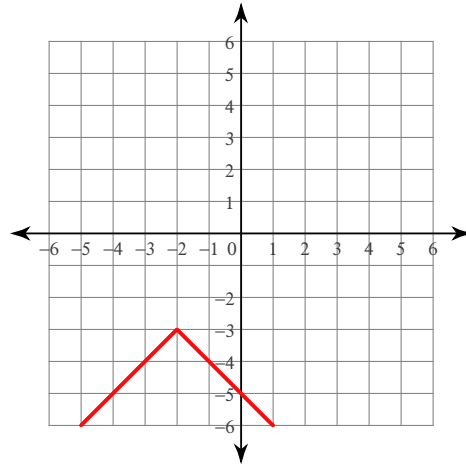
$$398) y = -|x| - 1$$



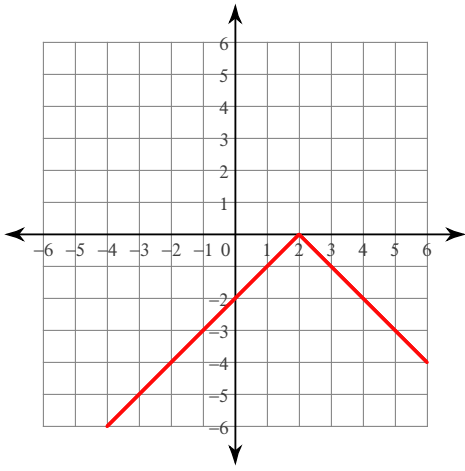
$$399) y = -|x + 2| + 4$$



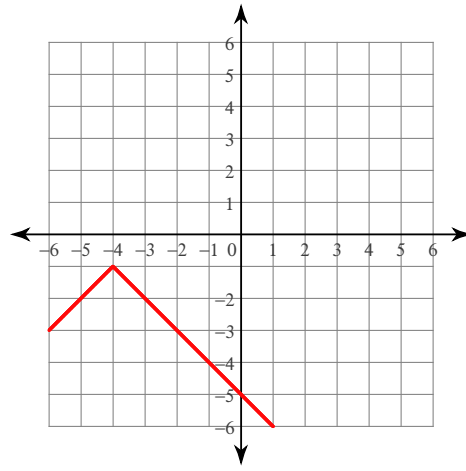
$$400) y = -|x + 2| - 3$$



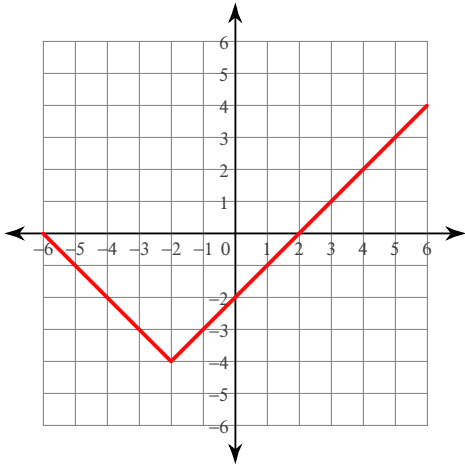
$$401) y = -|x - 2|$$



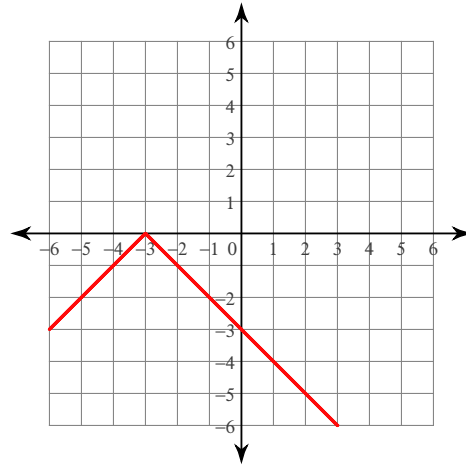
$$402) y = -|x + 4| - 1$$



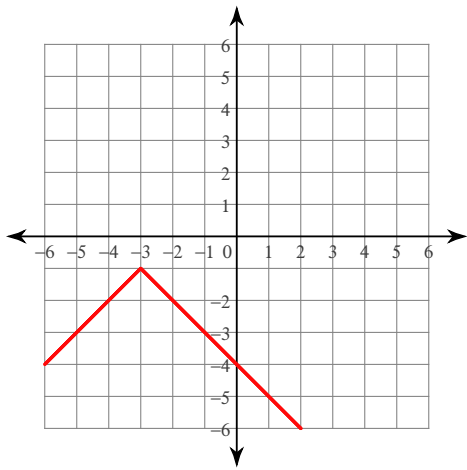
$$403) y = |x + 2| - 4$$



$$404) y = -|x + 3|$$



$$405) y = -|x + 3| - 1$$



$$406) y = -|x| + 4$$

