

## Linear and affine functions - point-slope form

**Write down point-slope form from given slope and y-intercept:**

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

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

3) Slope =  $-\frac{1}{5}$ , y-intercept = 0

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

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

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

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

8) Slope = 0, y-intercept = 1

9) Slope = -2, y-intercept = -3

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

11) Slope = -2, y-intercept = -2

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

13) Slope = 9, y-intercept = 5

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

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

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

17) Slope =  $-\frac{5}{3}$ , y-intercept = -4

18) Slope = -6, y-intercept = 1

19) Slope =  $-\frac{7}{3}$ , y-intercept = -3

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

21) Slope = 7, y-intercept = 4

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

23) Slope = -6, y-intercept = 5

24) Slope =  $-\frac{8}{3}$ , y-intercept = -3

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

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

27) Slope =  $\frac{5}{4}$ , y-intercept = 0

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

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

30) Slope = -2, y-intercept = 0

31) Slope = 0, y-intercept = 5

32) Slope =  $-\frac{7}{2}$ , y-intercept = 4

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

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

35) Slope =  $-\frac{8}{5}$ , y-intercept = 3

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

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

38) Slope =  $\frac{7}{2}$ , y-intercept = -3

39) Slope = 2, y-intercept = 1

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

41) Slope = 1, y-intercept = 2

42) Slope =  $\frac{3}{4}$ , y-intercept = -5

43) Slope = 4, y-intercept = -4

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

45) Slope =  $\frac{9}{5}$ , y-intercept = -4

46) Slope = 2, y-intercept = 2

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

48) Slope =  $\frac{8}{5}$ , y-intercept = 3

49) Slope =  $\frac{3}{4}$ , y-intercept = 0

50) Slope =  $\frac{9}{2}$ , y-intercept = -4

51) Slope = -1, y-intercept = -5

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

53) Slope =  $-\frac{4}{5}$ , y-intercept = 1

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

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

56) Slope = 3, y-intercept = 1

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

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

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

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

61) Slope =  $\frac{5}{3}$ , y-intercept = 0

62) Slope = 6, y-intercept = 1

63) Slope = 1, y-intercept = 1

64) Slope =  $-\frac{1}{5}$ , y-intercept = 4

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

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

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

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

69) Slope =  $\frac{9}{2}$ , y-intercept = 5

70) Slope =  $\frac{3}{2}$ , y-intercept = 5

71) Slope =  $\frac{1}{5}$ , y-intercept = 4

72) Slope =  $-1$ , y-intercept = 4

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

74) Slope =  $-\frac{7}{2}$ , y-intercept =  $-4$

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

76) Slope =  $\frac{1}{2}$ , y-intercept = 0

77) Slope = 1, y-intercept =  $-2$

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

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

80) Slope = 3, y-intercept = 5

81) Slope =  $-4$ , y-intercept =  $-5$

82) Slope =  $-\frac{2}{5}$ , y-intercept =  $-3$

83) Slope = 3, y-intercept = 0

84) Slope =  $-10$ , y-intercept =  $-5$

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

86) Slope = 6, y-intercept =  $-4$

87) Slope =  $-\frac{4}{3}$ , y-intercept =  $-5$

88) Slope =  $-\frac{5}{2}$ , y-intercept = 3

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

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

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

92) Slope = -5, y-intercept = 3

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

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

95) Slope =  $-\frac{5}{4}$ , y-intercept = 0

96) Slope = -9, y-intercept = -5

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

98) Slope = 1, y-intercept = 3

99) Slope = 2, y-intercept = 0

100) Slope = 4, y-intercept = 5

**Write down point-slope form from a point and slope:**

101) through: (-2, 3), slope =  $-\frac{7}{2}$

102) through: (1, 3), slope = 8

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

104) through: (3, -2), slope =  $-\frac{7}{3}$

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

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

107) through:  $(1, 4)$ , slope = 3

108) through:  $(0, 4)$ , slope = 1

109) through:  $(-1, -2)$ , slope = 4

110) through:  $(-4, -5)$ , slope =  $\frac{9}{4}$

111) through:  $(2, -3)$ , slope =  $\frac{7}{3}$

112) through:  $(4, -2)$ , slope =  $-\frac{7}{6}$

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

114) through:  $(1, 4)$ , slope = 0

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

116) through:  $(5, -3)$ , slope =  $\frac{1}{5}$

117) through:  $(4, 0)$ , slope = undefined

118) through:  $(5, -3)$ , slope = -1

119) through:  $(-1, 0)$ , slope = 4

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

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

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

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

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

125) through: (1, 1), slope = 6

126) through: (2, 0), slope = 2

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

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

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

130) through: (2, -5), slope = -4

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

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

133) through: (-4, 5), slope =  $-\frac{7}{8}$

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

135) through: (-5, 5), slope = undefined

136) through: (-3, 2), slope = -1

137) through: (-4, 4), slope = undefined

138) through: (-1, -3), slope = -2

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

140) through: (0, 3), slope = 0

141) through: (-3, -1), slope =  $\frac{5}{6}$

142) through: (4, -3), slope =  $-\frac{8}{5}$

143) through: (0, -2), slope = -1

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

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

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

147) through:  $(1, 1)$ , slope =  $5$

148) through:  $(4, -5)$ , slope =  $-\frac{3}{4}$

149) through:  $(5, 3)$ , slope =  $-\frac{1}{5}$

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

151) through:  $(1, 5)$ , slope =  $4$

152) through:  $(2, 1)$ , slope =  $-\frac{4}{5}$

153) through:  $(-1, 5)$ , slope =  $-7$

154) through:  $(-3, -4)$ , slope =  $2$

155) through:  $(-1, -4)$ , slope = undefined

156) through:  $(3, 5)$ , slope =  $2$

157) through:  $(5, 5)$ , slope =  $1$

158) through:  $(-1, 1)$ , slope =  $-6$

159) through:  $(3, -5)$ , slope =  $-\frac{4}{3}$

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

161) through:  $(3, 3)$ , slope =  $\frac{6}{7}$

162) through:  $(-1, -4)$ , slope =  $-5$

163) through:  $(5, 1)$ , slope =  $\frac{4}{5}$

164) through:  $(1, 5)$ , slope =  $-\frac{3}{2}$

165) through:  $(1, -3)$ , slope =  $\frac{1}{6}$

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

167) through:  $(5, 4)$ , slope =  $-\frac{1}{6}$

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

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

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

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

172) through:  $(-2, 5)$ , slope =  $-5$

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

174) through:  $(-5, 4)$ , slope =  $-\frac{6}{5}$

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

176) through:  $(2, -4)$ , slope =  $-\frac{9}{5}$

177) through:  $(-5, 0)$ , slope =  $-\frac{1}{4}$

178) through:  $(-3, -4)$ , slope =  $\frac{9}{2}$

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

180) through:  $(-5, -2)$ , slope =  $1$

181) through:  $(-2, -5)$ , slope = 5

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

183) through:  $(-4, 4)$ , slope =  $-\frac{1}{2}$

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

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

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

187) through:  $(0, 2)$ , slope = undefined

188) through:  $(-4, 0)$ , slope =  $-\frac{1}{4}$

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

190) through:  $(1, -5)$ , slope = -3

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

192) through:  $(2, -5)$ , slope = undefined

193) through:  $(2, 3)$ , slope = 4

194) through:  $(0, 3)$ , slope =  $\frac{1}{2}$

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

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

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

198) through:  $(-2, -1)$ , slope =  $\frac{6}{7}$

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

200) through:  $(3, 0)$ , slope =  $-\frac{2}{3}$

**Write down point-slope form from two points:**

201) through:  $(-2, 1)$  and  $(-5, -4)$

202) through:  $(-5, -2)$  and  $(0, 3)$

203) through:  $(0, -5)$  and  $(-4, 3)$

204) through:  $(2, -5)$  and  $(0, 4)$

205) through:  $(-4, 1)$  and  $(0, 5)$

206) through:  $(0, -3)$  and  $(3, -3)$

207) through:  $(0, 1)$  and  $(-4, 2)$

208) through:  $(1, -3)$  and  $(4, -4)$

209) through:  $(-4, 3)$  and  $(5, 4)$

210) through:  $(-1, -5)$  and  $(5, 1)$

211) through:  $(5, -2)$  and  $(-5, -5)$

212) through:  $(2, 0)$  and  $(1, 3)$

213) through:  $(1, 2)$  and  $(0, 5)$

214) through:  $(-4, -1)$  and  $(-3, -3)$

215) through:  $(-1, -4)$  and  $(-3, 5)$

216) through:  $(-1, 3)$  and  $(0, -3)$

217) through:  $(4, 2)$  and  $(0, 0)$

218) through:  $(0, -1)$  and  $(3, -2)$

219) through:  $(-2, 3)$  and  $(4, -3)$

220) through:  $(0, -3)$  and  $(2, -2)$

221) through:  $(-4, 1)$  and  $(0, -5)$

222) through:  $(1, -1)$  and  $(0, 4)$

223) through:  $(0, 4)$  and  $(2, 4)$

224) through:  $(0, 0)$  and  $(2, -1)$

225) through:  $(4, -4)$  and  $(-1, 2)$

226) through:  $(4, -3)$  and  $(1, -5)$

227) through:  $(0, 3)$  and  $(-1, -2)$

228) through:  $(5, 4)$  and  $(3, -5)$

229) through:  $(2, -2)$  and  $(-5, 5)$

230) through:  $(-1, 0)$  and  $(-5, -5)$

231) through:  $(0, 0)$  and  $(1, 2)$

232) through:  $(-1, 3)$  and  $(5, 2)$

233) through:  $(-5, 1)$  and  $(0, 0)$

234) through:  $(2, 0)$  and  $(0, 0)$

235) through:  $(0, -2)$  and  $(0, 1)$

236) through:  $(0, 4)$  and  $(2, -2)$

237) through:  $(2, -5)$  and  $(0, -4)$

238) through:  $(0, 4)$  and  $(-5, 5)$

239) through:  $(-5, -4)$  and  $(0, 4)$

240) through:  $(0, -1)$  and  $(-5, 2)$

241) through:  $(-1, -4)$  and  $(-1, 4)$

242) through:  $(2, 4)$  and  $(-2, -3)$

243) through:  $(-3, -1)$  and  $(1, -5)$

244) through:  $(-1, -3)$  and  $(-4, -5)$

245) through:  $(-5, -5)$  and  $(4, 1)$

246) through:  $(4, 0)$  and  $(0, -1)$

247) through:  $(-5, -5)$  and  $(0, 0)$

248) through:  $(2, -2)$  and  $(-5, -5)$

249) through:  $(0, 0)$  and  $(-2, -5)$

250) through:  $(3, 2)$  and  $(0, 1)$

251) through:  $(-1, 2)$  and  $(5, -1)$

252) through:  $(-4, -1)$  and  $(-5, -4)$

253) through:  $(-2, 2)$  and  $(-1, -4)$

254) through:  $(2, -5)$  and  $(0, -2)$

255) through:  $(-1, 0)$  and  $(-2, -3)$

256) through:  $(-4, -4)$  and  $(-3, 3)$

257) through:  $(-4, 2)$  and  $(1, 1)$

258) through:  $(-5, 2)$  and  $(3, -5)$

259) through:  $(1, 3)$  and  $(-5, -3)$

260) through:  $(2, -2)$  and  $(2, 1)$

261) through:  $(-2, 0)$  and  $(3, -3)$

262) through:  $(-5, -1)$  and  $(4, 4)$

263) through:  $(0, 5)$  and  $(2, -2)$

264) through:  $(-1, -3)$  and  $(0, -2)$

265) through:  $(1, -4)$  and  $(0, 3)$

266) through:  $(3, 1)$  and  $(0, -4)$

267) through:  $(0, 5)$  and  $(-3, -5)$

268) through:  $(1, 2)$  and  $(-2, 1)$

269) through:  $(1, -3)$  and  $(-4, -1)$

270) through:  $(3, 4)$  and  $(0, -5)$

271) through:  $(3, 5)$  and  $(1, 0)$

272) through:  $(4, -3)$  and  $(5, 1)$

273) through:  $(-3, -2)$  and  $(3, 3)$

274) through:  $(5, 4)$  and  $(0, -5)$

275) through:  $(0, 1)$  and  $(-2, 0)$

276) through:  $(-4, -3)$  and  $(-3, -5)$

277) through:  $(0, -2)$  and  $(-3, -4)$

278) through:  $(1, -4)$  and  $(-1, 5)$

279) through:  $(0, -1)$  and  $(2, 4)$

280) through:  $(0, -3)$  and  $(1, 4)$

281) through:  $(-1, 2)$  and  $(0, -2)$

282) through:  $(-2, -2)$  and  $(2, 0)$

283) through:  $(0, -1)$  and  $(-4, 5)$

284) through:  $(0, 4)$  and  $(3, 3)$

285) through:  $(-2, 2)$  and  $(0, -4)$

286) through:  $(5, 1)$  and  $(0, 5)$

287) through:  $(-5, 3)$  and  $(-3, 0)$

288) through:  $(-2, 1)$  and  $(-3, -2)$

289) through:  $(0, 1)$  and  $(2, -3)$

290) through:  $(-3, 2)$  and  $(3, -2)$

291) through:  $(3, -2)$  and  $(1, 2)$

292) through:  $(-5, 4)$  and  $(5, 3)$

293) through:  $(1, 1)$  and  $(3, -2)$

294) through:  $(4, -4)$  and  $(-5, -4)$

295) through:  $(-3, -3)$  and  $(-2, 1)$

296) through:  $(-1, -5)$  and  $(3, 0)$

297) through:  $(-5, -1)$  and  $(-2, 4)$

298) through:  $(4, -3)$  and  $(-2, 4)$

299) through:  $(-3, 0)$  and  $(0, -4)$

300) through:  $(1, 4)$  and  $(4, 2)$

**Write down point-slope form from given point and parallel linear functions:**

301) through:  $(1, -5)$ , parallel to  $y = -2x + 1$

302) through:  $(3, -3)$ , parallel to  $y = -\frac{5}{3}x$

303) through:  $(2, 0)$ , parallel to  $y = -\frac{5}{3}x + 5$

304) through:  $(2, -3)$ , parallel to  $y = -\frac{7}{2}x - 4$

305) through:  $(1, 3)$ , parallel to  $y = 3x + 1$

306) through:  $(-5, -3)$ , parallel to  $y = \frac{5}{8}x - 4$

307) through:  $(5, 4)$ , parallel to  $y = \frac{7}{5}x - 4$

308) through:  $(2, -4)$ , parallel to  $y = -4x + 3$

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

310) through:  $(0, 3)$ , parallel to  $y = -x - 4$

311) through:  $(-5, -5)$ , parallel to  $y = \frac{6}{5}x - 2$

312) through:  $(-1, 1)$ , parallel to  $y = x + 5$

313) through:  $(-3, 3)$ , parallel to  $y = 0$

314) through:  $(-5, 5)$ , parallel to  $y = -\frac{3}{5}x + 1$

315) through:  $(4, -1)$ , parallel to  $y = \frac{1}{2}x - 1$

316) through:  $(1, 3)$ , parallel to  $y = 2x + 5$

317) through:  $(2, -5)$ , parallel to  $y = -\frac{3}{2}x + 2$

318) through:  $(3, 0)$ , parallel to  $y = \frac{4}{7}x + 2$

319) through:  $(-4, 0)$ , parallel to  $y = -\frac{5}{4}x + 3$

320) through:  $(-2, 4)$ , parallel to  $y = -3x + 1$

321) through:  $(3, -3)$ , parallel to  $y = 2$

322) through:  $(2, 2)$ , parallel to  $y = -3x + 3$

323) through:  $(-2, -4)$ , parallel to  $y = -\frac{1}{2}x - 1$

324) through:  $(2, 2)$ , parallel to  $y = -\frac{3}{2}x + 2$

325) through:  $(-1, -3)$ , parallel to  $y = 8x - 1$

326) through:  $(-5, -1)$ , parallel to  $y = x - 1$

327) through:  $(-3, 4)$ , parallel to  $y = -\frac{4}{3}x + 3$

328) through:  $(-4, 1)$ , parallel to  $y = \frac{3}{4}x - 1$

329) through:  $(1, -3)$ , parallel to  $x = 0$

330) through:  $(3, 5)$ , parallel to  $y = \frac{4}{3}x - 2$

331) through:  $(2, 5)$ , parallel to  $y = \frac{3}{2}x + 5$

332) through:  $(-4, -2)$ , parallel to  $y = \frac{1}{5}x - 2$

333) through:  $(-2, -5)$ , parallel to  $y = x - 4$

334) through:  $(0, 2)$ , parallel to  $y = -\frac{3}{2}x$

335) through:  $(2, 5)$ , parallel to  $y = \frac{3}{4}x + 1$

336) through:  $(3, -2)$ , parallel to  $y = -\frac{1}{3}x + 3$

337) through:  $(-3, -2)$ , parallel to  $y = \frac{7}{3}x$

338) through:  $(-3, 4)$ , parallel to  $y = -\frac{2}{3}x - 3$

339) through:  $(-4, -5)$ , parallel to  $y = \frac{7}{6}x$

340) through:  $(-3, -3)$ , parallel to  $y = -\frac{5}{2}x - 4$

341) through:  $(1, 5)$ , parallel to  $y = 10x + 5$

342) through:  $(-3, -4)$ , parallel to  $y = 3x - 5$

343) through:  $(-5, 0)$ , parallel to  $y = x - 1$

344) through:  $(2, -2)$ , parallel to  $y = -x - 5$

345) through:  $(-1, 3)$ , parallel to  $y = \frac{1}{4}x - 3$

346) through:  $(-3, 4)$ , parallel to  $y = -2x + 3$

347) through:  $(5, -2)$ , parallel to  $x = 0$

348) through:  $(-3, -4)$ , parallel to  $y = \frac{5}{3}x - 1$

349) through:  $(-3, 4)$ , parallel to  $y = -\frac{5}{3}x - 2$

350) through:  $(3, -2)$ , parallel to  $y = \frac{3}{2}x + 5$

351) through:  $(3, -2)$ , parallel to  $y = -\frac{1}{5}x + 4$

352) through:  $(-3, -1)$ , parallel to  $y = -\frac{1}{2}x$

353) through:  $(0, 4)$ , parallel to  $y = \frac{1}{2}x - 3$

354) through:  $(-1, -2)$ , parallel to  $y = 4$

355) through:  $(1, -5)$ , parallel to  $y = 7x - 3$

356) through:  $(-2, 1)$ , parallel to  $y = \frac{4}{3}x + 3$

357) through:  $(3, 2)$ , parallel to  $y = 2x + 3$

358) through:  $(-5, 4)$ , parallel to  $y = -x + 5$

359) through:  $(1, 5)$ , parallel to  $y = 7x + 1$

360) through:  $(2, 4)$ , parallel to  $y = \frac{7}{2}x$

361) through: (4, 1), parallel to  $y = \frac{1}{5}x - 4$

362) through: (-5, 0), parallel to  $y = \frac{1}{2}x - 1$

363) through: (-4, 5), parallel to  $y = -\frac{9}{4}x - 5$

364) through: (-2, -2), parallel to  $y = \frac{7}{2}x + 3$

365) through: (-5, 2), parallel to  $y = \frac{1}{5}x + 4$

366) through: (1, -1), parallel to  $y = -5x + 2$

367) through: (-5, -4), parallel to  $y = x - 3$

368) through: (-4, 0), parallel to  $y = \frac{5}{6}x + 2$

369) through: (-5, 5), parallel to  $y = -\frac{4}{5}x - 4$

370) through: (1, 0), parallel to  $y = 4x$

371) through: (-3, -2), parallel to  $y = -x - 3$

372) through: (5, -4), parallel to  $y = -\frac{7}{3}x + 5$

373) through: (3, -2), parallel to  $y = -\frac{7}{3}x$

374) through: (5, 1), parallel to  $y = \frac{2}{5}x + 2$

375) through: (2, -1), parallel to  $y = 4x + 4$

376) through: (-4, -1), parallel to  $y = x - 1$

377) through: (-3, 2), parallel to  $y = 2x + 5$

378) through: (-4, -1), parallel to  $x = 0$

379) through: (4, -2), parallel to  $y = -\frac{1}{4}x - 4$

380) through: (-5, 5), parallel to  $y = -\frac{9}{5}x$

381) through: (3, -2), parallel to  $y = -\frac{7}{4}x - 3$

382) through: (4, -5), parallel to  $y = -\frac{1}{8}x - 4$

383) through: (3, 3), parallel to  $y = \frac{4}{3}x + 3$

384) through: (3, 0), parallel to  $y = \frac{3}{8}x - 1$

385) through: (-4, 1), parallel to  $y = \frac{1}{4}x - 1$

386) through: (-3, 4), parallel to  $y = x - 3$

387) through: (3, 2), parallel to  $y = \frac{1}{4}x - 2$

388) through: (1, 5), parallel to  $y = 3x$

389) through: (4, -5), parallel to  $y = -\frac{5}{4}x + 4$

390) through: (4, 0), parallel to  $x = 0$

391) through: (-1, 4), parallel to  $y = \frac{5}{2}x + 5$

392) through: (-1, 5), parallel to  $y = 2x - 3$

393) through: (-3, 1), parallel to  $y = \frac{4}{3}x - 4$

394) through: (5, -3), parallel to  $y = -\frac{7}{5}x + 3$

395) through: (2, -3), parallel to  $y = -\frac{3}{2}x - 3$

396) through: (-5, -4), parallel to  $y = -\frac{1}{5}x$

397) through: (-4, 0), parallel to  $y = \frac{1}{9}x + 4$

398) through: (2, 3), parallel to  $y = \frac{3}{2}x + 2$

399) through: (1, 1), parallel to  $y = -x + 4$

400) through: (3, -2), parallel to  $y = -6x - 3$

**Write down point-slope form from given point and perpendicular function:**

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

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

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

404) through: (1, 1), perp. to  $y = x + 1$

405) through: (5, 0), perp. to  $y = 5x - 1$

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

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

408) through: (3, -1), perp. to  $y = -3x - 2$

409) through: (5, -4), perp. to  $y = \frac{5}{8}x - 5$

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

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

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

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

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

415) through:  $(4, 0)$ , perp. to  $y = \frac{4}{5}x - 2$

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

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

418) through:  $(0, -1)$ , perp. to  $y = \frac{1}{3}x - 4$

419) through:  $(4, 3)$ , perp. to  $y = -5x + 2$

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

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

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

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

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

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

426) through:  $(5, 0)$ , perp. to  $y = x - 5$

427) through:  $(0, -2)$ , perp. to  $y = \frac{3}{5}x + 1$

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

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

430) through:  $(-5, 0)$ , perp. to  $y = 5x$

431) through:  $(-1, -3)$ , perp. to  $y = -x - 4$

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

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

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

435) through:  $(2, 4)$ , perp. to  $y = -\frac{2}{7}x$

436) through:  $(4, -3)$ , perp. to  $y = -1$

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

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

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

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

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

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

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

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

445) through:  $(-3, 1)$ , perp. to  $x = 0$

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

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

448) through:  $(4, -5)$ , perp. to  $y = 3x + 3$

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

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

451) through:  $(-5, -3)$ , perp. to  $y = 4$

452) through:  $(-1, 4)$ , perp. to  $y = \frac{1}{6}x - 5$

453) through:  $(-1, 0)$ , perp. to  $y = x$

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

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

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

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

458) through:  $(1, -2)$ , perp. to  $y = \frac{1}{6}x - 5$

459) through:  $(-2, 1)$ , perp. to  $y = -2x + 3$

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

461) through:  $(-4, -4)$ , perp. to  $y = -\frac{7}{8}x - 4$

462) through:  $(2, -3)$ , perp. to  $y = \frac{2}{7}x - 1$

463) through:  $(-3, 5)$ , perp. to  $y = \frac{8}{9}x + 4$

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

465) through:  $(3, 1)$ , perp. to  $y = 8x - 5$

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

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

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

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

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

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

472) through:  $(-1, 5)$ , perp. to  $y = x + 4$

473) through:  $(-1, -5)$ , perp. to  $y = -x + 2$

474) through:  $(5, 4)$ , perp. to  $y = -\frac{5}{8}x + 4$

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

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

477) through:  $(2, 4)$ , perp. to  $y = 2x + 1$

478) through:  $(2, 2)$ , perp. to  $y = 2x + 3$

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

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

481) through:  $(-5, 4)$ , perp. to  $y = \frac{5}{6}x - 2$

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

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

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

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

486) through:  $(5, 2)$ , perp. to  $y = -\frac{5}{7}x - 1$

487) through:  $(-4, 0)$ , perp. to  $y = -4x + 1$

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

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

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

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

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

493) through:  $(-1, 2)$ , perp. to  $y = \frac{1}{7}x - 1$

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

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

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

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

498) through:  $(5, 4)$ , perp. to  $y = -\frac{1}{8}x - 2$

499) through:  $(3, -4)$ , perp. to  $y = -\frac{2}{9}x - 4$

500) through:  $(5, -5)$ , perp. to  $y = \frac{5}{8}x + 4$

## Linear and affine functions - point-slope form

Write down point-slope form from given slope and y-intercept:

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

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

3) Slope =  $-\frac{1}{5}$ , y-intercept = 0

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

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

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

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

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

9) Slope = -2, y-intercept = -3

$$y + 3 = -2x$$

11) Slope = -2, y-intercept = -2

$$y + 2 = -2x$$

13) Slope = 9, y-intercept = 5

$$y - 5 = 9x$$

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

$$y + 4 = x$$

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

$$y + 2 = 2x$$

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

$$y - 3 = -x$$

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

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

8) Slope = 0, y-intercept = 1

$$y - 1 = 0$$

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

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

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

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

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

$$y - 1 = -x$$

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

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

17) Slope =  $-\frac{5}{3}$ , y-intercept = -4

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

19) Slope =  $-\frac{7}{3}$ , y-intercept = -3

$$y + 3 = -\frac{7}{3}x$$

21) Slope = 7, y-intercept = 4

$$y - 4 = 7x$$

23) Slope = -6, y-intercept = 5

$$y - 5 = -6x$$

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

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

27) Slope =  $\frac{5}{4}$ , y-intercept = 0

$$y = \frac{5}{4}x$$

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

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

31) Slope = 0, y-intercept = 5

$$y - 5 = 0$$

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

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

18) Slope = -6, y-intercept = 1

$$y - 1 = -6x$$

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

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

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

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

24) Slope =  $-\frac{8}{3}$ , y-intercept = -3

$$y + 3 = -\frac{8}{3}x$$

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

$$y - 2 = -4x$$

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

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

30) Slope = -2, y-intercept = 0

$$y = -2x$$

32) Slope =  $-\frac{7}{2}$ , y-intercept = 4

$$y - 4 = -\frac{7}{2}x$$

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

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

35) Slope =  $-\frac{8}{5}$ , y-intercept = 3

$$y - 3 = -\frac{8}{5}x$$

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

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

39) Slope = 2, y-intercept = 1

$$y - 1 = 2x$$

41) Slope = 1, y-intercept = 2

$$y - 2 = x$$

43) Slope = 4, y-intercept = -4

$$y + 4 = 4x$$

45) Slope =  $\frac{9}{5}$ , y-intercept = -4

$$y + 4 = \frac{9}{5}x$$

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

$$y + 2 = \frac{7}{5}x$$

49) Slope =  $\frac{3}{4}$ , y-intercept = 0

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

51) Slope = -1, y-intercept = -5

$$y + 5 = -x$$

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

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

38) Slope =  $\frac{7}{2}$ , y-intercept = -3

$$y + 3 = \frac{7}{2}x$$

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

$$y - 2 = -x$$

42) Slope =  $\frac{3}{4}$ , y-intercept = -5

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

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

$$y + 3 = -4x$$

46) Slope = 2, y-intercept = 2

$$y - 2 = 2x$$

48) Slope =  $\frac{8}{5}$ , y-intercept = 3

$$y - 3 = \frac{8}{5}x$$

50) Slope =  $\frac{9}{2}$ , y-intercept = -4

$$y + 4 = \frac{9}{2}x$$

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

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

53) Slope =  $-\frac{4}{5}$ , y-intercept = 1

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

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

$$y + 3 = \frac{3}{4}x$$

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

$$y - 2 = \frac{5}{2}x$$

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

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

61) Slope =  $\frac{5}{3}$ , y-intercept = 0

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

63) Slope = 1, y-intercept = 1

$$y - 1 = x$$

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

$$y + 1 = x$$

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

$$y - 3 = -3x$$

69) Slope =  $\frac{9}{2}$ , y-intercept = 5

$$y - 5 = \frac{9}{2}x$$

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

$$y + 1 = 2x$$

56) Slope = 3, y-intercept = 1

$$y - 1 = 3x$$

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

$$y + 3 = -x$$

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

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

62) Slope = 6, y-intercept = 1

$$y - 1 = 6x$$

64) Slope =  $-\frac{1}{5}$ , y-intercept = 4

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

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

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

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

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

70) Slope =  $\frac{3}{2}$ , y-intercept = 5

$$y - 5 = \frac{3}{2}x$$

71) Slope =  $\frac{1}{5}$ , y-intercept = 4

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

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

$$y + 5 = -\frac{7}{4}x$$

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

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

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

$$y + 2 = x$$

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

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

81) Slope = -4, y-intercept = -5

$$y + 5 = -4x$$

83) Slope = 3, y-intercept = 0

$$y = 3x$$

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

$$y - 4 = \frac{1}{4}x$$

87) Slope =  $-\frac{4}{3}$ , y-intercept = -5

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

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

$$y - 4 = -x$$

74) Slope =  $-\frac{7}{2}$ , y-intercept = -4

$$y + 4 = -\frac{7}{2}x$$

76) Slope =  $\frac{1}{2}$ , y-intercept = 0

$$y = \frac{1}{2}x$$

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

$$y + 1 = \frac{1}{4}x$$

80) Slope = 3, y-intercept = 5

$$y - 5 = 3x$$

82) Slope =  $-\frac{2}{5}$ , y-intercept = -3

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

84) Slope = -10, y-intercept = -5

$$y + 5 = -10x$$

86) Slope = 6, y-intercept = -4

$$y + 4 = 6x$$

88) Slope =  $-\frac{5}{2}$ , y-intercept = 3

$$y - 3 = -\frac{5}{2}x$$

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

$$y + 5 = \frac{2}{5}x$$

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

$$y - 5 = -\frac{7}{5}x$$

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

$$y - 4 = -3x$$

95) Slope =  $-\frac{5}{4}$ , y-intercept = 0

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

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

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

99) Slope = 2, y-intercept = 0

$$y = 2x$$

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

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

92) Slope = -5, y-intercept = 3

$$y - 3 = -5x$$

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

$$y + 2 = \frac{2}{5}x$$

96) Slope = -9, y-intercept = -5

$$y + 5 = -9x$$

98) Slope = 1, y-intercept = 3

$$y - 3 = x$$

100) Slope = 4, y-intercept = 5

$$y - 5 = 4x$$

**Write down point-slope form from a point and slope:**

101) through: (-2, 3), slope =  $-\frac{7}{2}$

$$y - 3 = -\frac{7}{2}(x + 2)$$

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

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

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

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

102) through: (1, 3), slope = 8

$$y - 3 = 8(x - 1)$$

104) through: (3, -2), slope =  $-\frac{7}{3}$

$$y + 2 = -\frac{7}{3}(x - 3)$$

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

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

107) through: (1, 4), slope = 3

$$y - 4 = 3(x - 1)$$

108) through: (0, 4), slope = 1

$$y - 4 = x$$

109) through: (-1, -2), slope = 4

$$y + 2 = 4(x + 1)$$

110) through: (-4, -5), slope =  $\frac{9}{4}$

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

111) through: (2, -3), slope =  $\frac{7}{3}$

$$y + 3 = \frac{7}{3}(x - 2)$$

112) through: (4, -2), slope =  $-\frac{7}{6}$

$$y + 2 = -\frac{7}{6}(x - 4)$$

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

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

114) through: (1, 4), slope = 0

$$y - 4 = 0$$

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

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

116) through: (5, -3), slope =  $\frac{1}{5}$

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

117) through: (4, 0), slope = undefined

$$0 = x - 4$$

118) through: (5, -3), slope = -1

$$y + 3 = -(x - 5)$$

119) through: (-1, 0), slope = 4

$$y = 4(x + 1)$$

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

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

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

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

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

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

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

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

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

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

125) through: (1, 1), slope = 6

$$y - 1 = 6(x - 1)$$

126) through: (2, 0), slope = 2

$$y = 2(x - 2)$$

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

$$y - 3 = -\frac{2}{5}(x - 5)$$

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

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

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

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

130) through: (2, -5), slope = -4

$$y + 5 = -4(x - 2)$$

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

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

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

$$y + 4 = -\frac{7}{2}(x - 2)$$

133) through: (-4, 5), slope =  $-\frac{7}{8}$

$$y - 5 = -\frac{7}{8}(x + 4)$$

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

$$y - 1 = \frac{3}{2}(x - 4)$$

135) through: (-5, 5), slope = undefined

$$0 = x + 5$$

136) through: (-3, 2), slope = -1

$$y - 2 = -(x + 3)$$

137) through: (-4, 4), slope = undefined

$$0 = x + 4$$

138) through: (-1, -3), slope = -2

$$y + 3 = -2(x + 1)$$

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

$$y + 2 = \frac{7}{5}(x + 1)$$

140) through: (0, 3), slope = 0

$$y - 3 = 0$$

141) through: (-3, -1), slope =  $\frac{5}{6}$

$$y + 1 = \frac{5}{6}(x + 3)$$

142) through: (4, -3), slope =  $-\frac{8}{5}$

$$y + 3 = -\frac{8}{5}(x - 4)$$

143) through: (0, -2), slope = -1

$$y + 2 = -x$$

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

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

146) through: (2, 2), slope = -1

$$y - 2 = -(x - 2)$$

148) through: (4, -5), slope =  $-\frac{3}{4}$

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

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

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

152) through: (2, 1), slope =  $-\frac{4}{5}$

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

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

$$y + 4 = 2(x + 3)$$

156) through: (3, 5), slope = 2

$$y - 5 = 2(x - 3)$$

158) through: (-1, 1), slope = -6

$$y - 1 = -6(x + 1)$$

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

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

162) through: (-1, -4), slope = -5

$$y + 4 = -5(x + 1)$$

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

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

147) through: (1, 1), slope = 5

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

149) through: (5, 3), slope =  $-\frac{1}{5}$

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

151) through: (1, 5), slope = 4

$$y - 5 = 4(x - 1)$$

153) through: (-1, 5), slope = -7

$$y - 5 = -7(x + 1)$$

155) through: (-1, -4), slope = undefined

$$0 = x + 1$$

157) through: (5, 5), slope = 1

$$y - 5 = x - 5$$

159) through: (3, -5), slope =  $-\frac{4}{3}$

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

161) through: (3, 3), slope =  $\frac{6}{7}$

$$y - 3 = \frac{6}{7}(x - 3)$$

163) through: (5, 1), slope =  $\frac{4}{5}$

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

165) through: (1, -3), slope =  $\frac{1}{6}$

$$y + 3 = \frac{1}{6}(x - 1)$$

167) through: (5, 4), slope =  $-\frac{1}{6}$

$$y - 4 = -\frac{1}{6}(x - 5)$$

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

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

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

$$y - 5 = \frac{3}{2}(x - 2)$$

173) through: (-1, -1), slope = -4

$$y + 1 = -4(x + 1)$$

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

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

177) through: (-5, 0), slope =  $-\frac{1}{4}$

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

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

$$y + 5 = -\frac{7}{2}(x - 2)$$

164) through: (1, 5), slope =  $-\frac{3}{2}$

$$y - 5 = -\frac{3}{2}(x - 1)$$

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

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

168) through: (1, -1), slope = -2

$$y + 1 = -2(x - 1)$$

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

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

172) through: (-2, 5), slope = -5

$$y - 5 = -5(x + 2)$$

174) through: (-5, 4), slope =  $-\frac{6}{5}$

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

176) through: (2, -4), slope =  $-\frac{9}{5}$

$$y + 4 = -\frac{9}{5}(x - 2)$$

178) through: (-3, -4), slope =  $\frac{9}{2}$

$$y + 4 = \frac{9}{2}(x + 3)$$

180) through: (-5, -2), slope = 1

$$y + 2 = x + 5$$

181) through:  $(-2, -5)$ , slope = 5

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

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

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

183) through:  $(-4, 4)$ , slope =  $-\frac{1}{2}$

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

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

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

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

$$y - 2 = -\frac{7}{5}(x + 5)$$

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

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

187) through:  $(0, 2)$ , slope = undefined

$$0 = x$$

188) through:  $(-4, 0)$ , slope =  $-\frac{1}{4}$

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

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

$$y + 3 = -2(x - 1)$$

190) through:  $(1, -5)$ , slope =  $-3$

$$y + 5 = -3(x - 1)$$

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

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

192) through:  $(2, -5)$ , slope = undefined

$$0 = x - 2$$

193) through:  $(2, 3)$ , slope = 4

$$y - 3 = 4(x - 2)$$

194) through:  $(0, 3)$ , slope =  $\frac{1}{2}$

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

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

$$y - 2 = -\frac{1}{4}(x + 3)$$

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

$$y + 1 = 0$$

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

$$y - 2 = -2(x + 3)$$

198) through:  $(-2, -1)$ , slope =  $\frac{6}{7}$

$$y + 1 = \frac{6}{7}(x + 2)$$

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

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

200) through:  $(3, 0)$ , slope =  $-\frac{2}{3}$

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

**Write down point-slope form from two points:**

201) through:  $(-2, 1)$  and  $(-5, -4)$

$$y - 1 = \frac{5}{3}(x + 2)$$

202) through:  $(-5, -2)$  and  $(0, 3)$

$$y + 2 = x + 5$$

203) through:  $(0, -5)$  and  $(-4, 3)$

$$y + 5 = -2x$$

204) through:  $(2, -5)$  and  $(0, 4)$

$$y + 5 = -\frac{9}{2}(x - 2)$$

205) through:  $(-4, 1)$  and  $(0, 5)$

$$y - 1 = x + 4$$

206) through:  $(0, -3)$  and  $(3, -3)$

$$y + 3 = 0$$

207) through:  $(0, 1)$  and  $(-4, 2)$

$$y - 1 = -\frac{1}{4}x$$

208) through:  $(1, -3)$  and  $(4, -4)$

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

209) through:  $(-4, 3)$  and  $(5, 4)$

$$y - 3 = \frac{1}{9}(x + 4)$$

210) through:  $(-1, -5)$  and  $(5, 1)$

$$y + 5 = x + 1$$

211) through:  $(5, -2)$  and  $(-5, -5)$

$$y + 2 = \frac{3}{10}(x - 5)$$

212) through:  $(2, 0)$  and  $(1, 3)$

$$y = -3(x - 2)$$

213) through:  $(1, 2)$  and  $(0, 5)$

$$y - 2 = -3(x - 1)$$

214) through:  $(-4, -1)$  and  $(-3, -3)$

$$y + 1 = -2(x + 4)$$

215) through:  $(-1, -4)$  and  $(-3, 5)$

$$y + 4 = -\frac{9}{2}(x + 1)$$

216) through:  $(-1, 3)$  and  $(0, -3)$

$$y - 3 = -6(x + 1)$$

217) through:  $(4, 2)$  and  $(0, 0)$

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

218) through:  $(0, -1)$  and  $(3, -2)$

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

219) through:  $(-2, 3)$  and  $(4, -3)$

$$y - 3 = -(x + 2)$$

220) through:  $(0, -3)$  and  $(2, -2)$

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

221) through:  $(-4, 1)$  and  $(0, -5)$

$$y - 1 = -\frac{3}{2}(x + 4)$$

223) through:  $(0, 4)$  and  $(2, 4)$

$$y - 4 = 0$$

225) through:  $(4, -4)$  and  $(-1, 2)$

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

227) through:  $(0, 3)$  and  $(-1, -2)$

$$y - 3 = 5x$$

229) through:  $(2, -2)$  and  $(-5, 5)$

$$y + 2 = -(x - 2)$$

231) through:  $(0, 0)$  and  $(1, 2)$

$$y = 2x$$

233) through:  $(-5, 1)$  and  $(0, 0)$

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

235) through:  $(0, -2)$  and  $(0, 1)$

$$0 = x$$

237) through:  $(2, -5)$  and  $(0, -4)$

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

239) through:  $(-5, -4)$  and  $(0, 4)$

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

241) through:  $(-1, -4)$  and  $(-1, 4)$

$$0 = x + 1$$

222) through:  $(1, -1)$  and  $(0, 4)$

$$y + 1 = -5(x - 1)$$

224) through:  $(0, 0)$  and  $(2, -1)$

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

226) through:  $(4, -3)$  and  $(1, -5)$

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

228) through:  $(5, 4)$  and  $(3, -5)$

$$y - 4 = \frac{9}{2}(x - 5)$$

230) through:  $(-1, 0)$  and  $(-5, -5)$

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

232) through:  $(-1, 3)$  and  $(5, 2)$

$$y - 3 = -\frac{1}{6}(x + 1)$$

234) through:  $(2, 0)$  and  $(0, 0)$

$$y = 0$$

236) through:  $(0, 4)$  and  $(2, -2)$

$$y - 4 = -3x$$

238) through:  $(0, 4)$  and  $(-5, 5)$

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

240) through:  $(0, -1)$  and  $(-5, 2)$

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

242) through:  $(2, 4)$  and  $(-2, -3)$

$$y - 4 = \frac{7}{4}(x - 2)$$

243) through:  $(-3, -1)$  and  $(1, -5)$

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

245) through:  $(-5, -5)$  and  $(4, 1)$

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

247) through:  $(-5, -5)$  and  $(0, 0)$

$$y + 5 = x + 5$$

249) through:  $(0, 0)$  and  $(-2, -5)$

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

251) through:  $(-1, 2)$  and  $(5, -1)$

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

253) through:  $(-2, 2)$  and  $(-1, -4)$

$$y - 2 = -6(x + 2)$$

255) through:  $(-1, 0)$  and  $(-2, -3)$

$$y = 3(x + 1)$$

257) through:  $(-4, 2)$  and  $(1, 1)$

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

259) through:  $(1, 3)$  and  $(-5, -3)$

$$y - 3 = x - 1$$

261) through:  $(-2, 0)$  and  $(3, -3)$

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

263) through:  $(0, 5)$  and  $(2, -2)$

$$y - 5 = -\frac{7}{2}x$$

244) through:  $(-1, -3)$  and  $(-4, -5)$

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

246) through:  $(4, 0)$  and  $(0, -1)$

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

248) through:  $(2, -2)$  and  $(-5, -5)$

$$y + 2 = \frac{3}{7}(x - 2)$$

250) through:  $(3, 2)$  and  $(0, 1)$

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

252) through:  $(-4, -1)$  and  $(-5, -4)$

$$y + 1 = 3(x + 4)$$

254) through:  $(2, -5)$  and  $(0, -2)$

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

256) through:  $(-4, -4)$  and  $(-3, 3)$

$$y + 4 = 7(x + 4)$$

258) through:  $(-5, 2)$  and  $(3, -5)$

$$y - 2 = -\frac{7}{8}(x + 5)$$

260) through:  $(2, -2)$  and  $(2, 1)$

$$0 = x - 2$$

262) through:  $(-5, -1)$  and  $(4, 4)$

$$y + 1 = \frac{5}{9}(x + 5)$$

264) through:  $(-1, -3)$  and  $(0, -2)$

$$y + 3 = x + 1$$

265) through: (1, -4) and (0, 3)

$$y + 4 = -7(x - 1)$$

267) through: (0, 5) and (-3, -5)

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

269) through: (1, -3) and (-4, -1)

$$y + 3 = -\frac{2}{5}(x - 1)$$

271) through: (3, 5) and (1, 0)

$$y - 5 = \frac{5}{2}(x - 3)$$

273) through: (-3, -2) and (3, 3)

$$y + 2 = \frac{5}{6}(x + 3)$$

275) through: (0, 1) and (-2, 0)

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

277) through: (0, -2) and (-3, -4)

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

279) through: (0, -1) and (2, 4)

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

281) through: (-1, 2) and (0, -2)

$$y - 2 = -4(x + 1)$$

283) through: (0, -1) and (-4, 5)

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

285) through: (-2, 2) and (0, -4)

$$y - 2 = -3(x + 2)$$

266) through: (3, 1) and (0, -4)

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

268) through: (1, 2) and (-2, 1)

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

270) through: (3, 4) and (0, -5)

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

272) through: (4, -3) and (5, 1)

$$y + 3 = 4(x - 4)$$

274) through: (5, 4) and (0, -5)

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

276) through: (-4, -3) and (-3, -5)

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

278) through: (1, -4) and (-1, 5)

$$y + 4 = -\frac{9}{2}(x - 1)$$

280) through: (0, -3) and (1, 4)

$$y + 3 = 7x$$

282) through: (-2, -2) and (2, 0)

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

284) through: (0, 4) and (3, 3)

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

286) through: (5, 1) and (0, 5)

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

287) through:  $(-5, 3)$  and  $(-3, 0)$

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

289) through:  $(0, 1)$  and  $(2, -3)$

$$y - 1 = -2x$$

291) through:  $(3, -2)$  and  $(1, 2)$

$$y + 2 = -2(x - 3)$$

293) through:  $(1, 1)$  and  $(3, -2)$

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

295) through:  $(-3, -3)$  and  $(-2, 1)$

$$y + 3 = 4(x + 3)$$

297) through:  $(-5, -1)$  and  $(-2, 4)$

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

299) through:  $(-3, 0)$  and  $(0, -4)$

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

288) through:  $(-2, 1)$  and  $(-3, -2)$

$$y - 1 = 3(x + 2)$$

290) through:  $(-3, 2)$  and  $(3, -2)$

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

292) through:  $(-5, 4)$  and  $(5, 3)$

$$y - 4 = -\frac{1}{10}(x + 5)$$

294) through:  $(4, -4)$  and  $(-5, -4)$

$$y + 4 = 0$$

296) through:  $(-1, -5)$  and  $(3, 0)$

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

298) through:  $(4, -3)$  and  $(-2, 4)$

$$y + 3 = -\frac{7}{6}(x - 4)$$

300) through:  $(1, 4)$  and  $(4, 2)$

$$y - 4 = -\frac{2}{3}(x - 1)$$

**Write down point-slope form from given point and parallel linear functions:**

301) through:  $(1, -5)$ , parallel to  $y = -2x + 1$

$$y + 5 = -2(x - 1)$$

302) through:  $(3, -3)$ , parallel to  $y = -\frac{5}{3}x + 3 = -\frac{5}{3}(x - 3)$

303) through:  $(2, 0)$ , parallel to  $y = -\frac{5}{3}x + 5 = -\frac{5}{3}(x - 3) + 5$

305) through:  $(1, 3)$ , parallel to  $y = 3x + 1$

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

306) through:  $(-5, -3)$ , parallel to  $y = \frac{5}{8}x - 4 = \frac{5}{8}(x + 5) - 4$

307) through:  $(5, 4)$ , parallel to  $y = \frac{7}{5}x - 4 = \frac{7}{5}(x - 5) + 4$

308) through:  $(2, -4)$ , parallel to  $y = -4x + 3$

$$y + 4 = -4(x - 2)$$

309) through:  $(-2, -1)$ , parallel to  $y = \frac{1}{2}x + 4$   $y + 1 = \frac{1}{2}(x + 2)$  through:  $(0, 3)$ , parallel to  $y = -x - 4$   
 $y - 3 = -x$

311) through:  $(-5, -5)$ , parallel to  $y = \frac{6}{5}x - 2$   $y + 5 = \frac{6}{5}(x + 5)$  312) through:  $(-1, 1)$ , parallel to  $y = x + 5$   
 $y - 1 = x + 1$

313) through:  $(-3, 3)$ , parallel to  $y = 0$   
 $y - 3 = 0$

314) through:  $(-5, 5)$ , parallel to  $y = -\frac{3}{5}x + 1$   $y - 5 = -\frac{3}{5}(x + 5)$

315) through:  $(4, -1)$ , parallel to  $y = \frac{1}{2}x - 1$   $y + 1 = \frac{1}{2}(x - 4)$  316) through:  $(1, 3)$ , parallel to  $y = 2x + 5$   
 $y - 3 = 2(x - 1)$

317) through:  $(2, -5)$ , parallel to  $y = -\frac{3}{2}x + 2$   $y + 5 = -\frac{3}{2}(x - 2)$  through:  $(3, 0)$ , parallel to  $y = \frac{4}{7}x + 2$   $y = \frac{4}{7}(x - 3)$

319) through:  $(-4, 0)$ , parallel to  $y = -\frac{5}{4}x + 3$   $y = -\frac{5}{4}(x + 4)$  320) through:  $(-2, 4)$ , parallel to  $y = -3x + 1$   
 $y - 4 = -3(x + 2)$

321) through:  $(3, -3)$ , parallel to  $y = 2$   
 $y + 3 = 0$

322) through:  $(2, 2)$ , parallel to  $y = -3x + 3$   
 $y - 2 = -3(x - 2)$

323) through:  $(-2, -4)$ , parallel to  $y = -\frac{1}{2}x - 1$   $y + 4 = -\frac{1}{2}(x - 2)$  through:  $(2, 2)$ , parallel to  $y = -\frac{3}{2}x + 2$   $y - 2 = -\frac{3}{2}(x - 2)$

325) through:  $(-1, -3)$ , parallel to  $y = 8x - 1$   
 $y + 3 = 8(x + 1)$

326) through:  $(-5, -1)$ , parallel to  $y = x - 1$   
 $y + 1 = x + 5$

327) through:  $(-3, 4)$ , parallel to  $y = -\frac{4}{3}x + 3$   $y - 4 = -\frac{4}{3}(x + 3)$  through:  $(-4, 1)$ , parallel to  $y = \frac{3}{4}x - 1$   $y - 1 = \frac{3}{4}(x + 4)$

329) through:  $(1, -3)$ , parallel to  $x = 0$   
 $0 = x - 1$

330) through:  $(3, 5)$ , parallel to  $y = \frac{4}{3}x - 2$   $y - 5 = \frac{4}{3}(x - 3)$

331) through:  $(2, 5)$ , parallel to  $y = \frac{3}{2}x + 5$   $y - 5 = \frac{3}{2}(x - 2)$  332) through:  $(-4, -2)$ , parallel to  $y = \frac{1}{5}x - 2$   $y + 2 = \frac{1}{5}(x + 4)$

333) through:  $(-2, -5)$ , parallel to  $y = x - 4$   
 $y + 5 = x + 2$

334) through:  $(0, 2)$ , parallel to  $y = -\frac{3}{2}x$   $y - 2 = -\frac{3}{2}x$

335) through: (2, 5), parallel to  $y = \frac{3}{4}x + 1$   $y - 5 = \frac{3}{4}(x - 2)$  through: (3, -2), parallel to  $y = -\frac{1}{3}x + 3$   $y + 2 = -\frac{1}{3}(x - 3)$

337) through: (-3, -2), parallel to  $y = \frac{7}{3}x + 2$   $y + 2 = \frac{7}{3}(x + 3)$  through: (-3, 4), parallel to  $y = -\frac{2}{3}x - 3$   $y - 4 = -\frac{2}{3}(x + 3)$

339) through: (-4, -5), parallel to  $y = \frac{7}{6}x + 5$   $y + 5 = \frac{7}{6}(x + 4)$  through: (-3, -3), parallel to  $y = -\frac{5}{2}x - 4$   $y + 3 = -\frac{5}{2}(x + 3)$

341) through: (1, 5), parallel to  $y = 10x + 5$   
 $y - 5 = 10(x - 1)$

342) through: (-3, -4), parallel to  $y = 3x - 5$   
 $y + 4 = 3(x + 3)$

343) through: (-5, 0), parallel to  $y = x - 1$   
 $y = x + 5$

344) through: (2, -2), parallel to  $y = -x - 5$   
 $y + 2 = -(x - 2)$

345) through: (-1, 3), parallel to  $y = \frac{1}{4}x - 3$   $y - 3 = \frac{1}{4}(x + 1)$  through: (-3, 4), parallel to  $y = -2x + 3$   
 $y - 4 = -2(x + 3)$

347) through: (5, -2), parallel to  $x = 0$   
 $0 = x - 5$

348) through: (-3, -4), parallel to  $y = \frac{5}{3}x - 1$   $y + 4 = \frac{5}{3}(x + 3)$

349) through: (-3, 4), parallel to  $y = -\frac{5}{3}x - 2$   $y - 4 = -\frac{5}{3}(x + 3)$  through: (3, -2), parallel to  $y = \frac{3}{2}x + 5$   $y + 2 = \frac{3}{2}(x - 3)$

351) through: (3, -2), parallel to  $y = -\frac{1}{5}x + 4$   $y + 2 = -\frac{1}{5}(x - 3)$  through: (-3, -1), parallel to  $y = -\frac{1}{2}x + 1$   $y + 1 = -\frac{1}{2}(x + 3)$

353) through: (0, 4), parallel to  $y = \frac{1}{2}x - 3$   $y - 4 = \frac{1}{2}x$  through: (-1, -2), parallel to  $y = 4$   
 $y + 2 = 0$

355) through: (1, -5), parallel to  $y = 7x - 3$   
 $y + 5 = 7(x - 1)$

356) through: (-2, 1), parallel to  $y = \frac{4}{3}x + 3$   $y - 1 = \frac{4}{3}(x + 2)$

357) through: (3, 2), parallel to  $y = 2x + 3$   
 $y - 2 = 2(x - 3)$

358) through: (-5, 4), parallel to  $y = -x + 5$   
 $y - 4 = -(x + 5)$

359) through: (1, 5), parallel to  $y = 7x + 1$   
 $y - 5 = 7(x - 1)$

360) through: (2, 4), parallel to  $y = \frac{7}{2}x - 4$   $y - 4 = \frac{7}{2}(x - 2)$

361) through: (4, 1), parallel to  $y = \frac{1}{5}x - 4$   $y - 1 = \frac{1}{5}(x - 4)$  362) through: (-5, 0), parallel to  $y = \frac{1}{2}x - 1$   $y = \frac{1}{2}(x + 5)$

363) through: (-4, 5), parallel to  $y = -\frac{9}{4}x - 5$   $y - 5 = -\frac{9}{4}(x + 4)$  364) through: (-2, -2), parallel to  $y = \frac{7}{2}x + 3$   $y + 2 = \frac{7}{2}(x + 2)$

365) through: (-5, 2), parallel to  $y = \frac{1}{5}x + 4$   $y - 2 = \frac{1}{5}(x + 5)$  366) through: (1, -1), parallel to  $y = -5x + 2$   
 $y + 1 = -5(x - 1)$

367) through: (-5, -4), parallel to  $y = x - 3$   
 $y + 4 = x + 5$  368) through: (-4, 0), parallel to  $y = \frac{5}{6}x + 2$   $y = \frac{5}{6}(x + 4)$

369) through: (-5, 5), parallel to  $y = -\frac{4}{5}x - 4$   $y - 5 = -\frac{4}{5}(x + 5)$  370) through: (1, 0), parallel to  $y = 4x$   
 $y = 4(x - 1)$

371) through: (-3, -2), parallel to  $y = -x - 3$   
 $y + 2 = -(x + 3)$  372) through: (5, -4), parallel to  $y = -\frac{7}{3}x + 5$   $y + 4 = -\frac{7}{3}(x - 5)$

373) through: (3, -2), parallel to  $y = -\frac{7}{3}x + 2$   $y + 2 = -\frac{7}{3}(x - 3)$  374) through: (5, 1), parallel to  $y = \frac{2}{5}x + 2$   $y - 1 = \frac{2}{5}(x - 5)$

375) through: (2, -1), parallel to  $y = 4x + 4$   
 $y + 1 = 4(x - 2)$  376) through: (-4, -1), parallel to  $y = x - 1$   
 $y + 1 = x + 4$

377) through: (-3, 2), parallel to  $y = 2x + 5$   
 $y - 2 = 2(x + 3)$  378) through: (-4, -1), parallel to  $x = 0$   
 $0 = x + 4$

379) through: (4, -2), parallel to  $y = -\frac{1}{4}x - 4$   $y + 2 = -\frac{1}{4}(x - 4)$  380) through: (-5, 5), parallel to  $y = -\frac{9}{5}x - 5$   $y - 5 = -\frac{9}{5}(x + 5)$

381) through: (3, -2), parallel to  $y = -\frac{7}{4}x - 3$   $y + 2 = -\frac{7}{4}(x - 3)$  382) through: (4, -5), parallel to  $y = -\frac{1}{8}x - 4$   $y + 5 = -\frac{1}{8}(x - 4)$

383) through: (3, 3), parallel to  $y = \frac{4}{3}x + 3$   $y - 3 = \frac{4}{3}(x - 3)$  384) through: (3, 0), parallel to  $y = \frac{3}{8}x - 1$   $y = \frac{3}{8}(x - 3)$

385) through: (-4, 1), parallel to  $y = \frac{1}{4}x - 1$   $y - 1 = \frac{1}{4}(x + 4)$  386) through: (-3, 4), parallel to  $y = x - 3$   
 $y - 4 = x + 3$

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

389) through: (4, -5), parallel to  $y = -\frac{5}{4}x + 4$   $y + 5 = -\frac{5}{4}(x - 4)$  390) through: (4, 0), parallel to  $x = 0$   
 $0 = x - 4$

391) through: (-1, 4), parallel to  $y = \frac{5}{2}x + 5$   $y - 4 = \frac{5}{2}(x + 1)$  392) through: (-1, 5), parallel to  $y = 2x - 3$   
 $y - 5 = 2(x + 1)$

393) through: (-3, 1), parallel to  $y = \frac{4}{3}x - 4$   $y - 1 = \frac{4}{3}(x + 3)$  394) through: (5, -3), parallel to  $y = -\frac{7}{5}x + 3$   $y + 3 = -\frac{7}{5}(x - 5)$

395) through: (2, -3), parallel to  $y = -\frac{3}{2}x - 3$   $y + 3 = -\frac{3}{2}(x - 2)$  396) through: (-5, -4), parallel to  $y = -\frac{1}{5}x + 4$   $y + 4 = -\frac{1}{5}(x + 5)$

397) through: (-4, 0), parallel to  $y = \frac{1}{9}x + 4$   $y = \frac{1}{9}(x + 4)$  398) through: (2, 3), parallel to  $y = \frac{3}{2}x + 2$   $y - 3 = \frac{3}{2}(x - 2)$

399) through: (1, 1), parallel to  $y = -x + 4$   
 $y - 1 = -(x - 1)$

400) through: (3, -2), parallel to  $y = -6x - 3$   
 $y + 2 = -6(x - 3)$

**Write down point-slope form from given point and perpendicular function:**

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

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

403) through: (-1, 4), perp. to  $y = -5x - 5$   $y - 4 = \frac{1}{5}(x + 1)$  404) through: (1, 1), perp. to  $y = x + 1$   
 $y - 1 = -(x - 1)$

405) through: (5, 0), perp. to  $y = 5x - 1$   $y = -\frac{1}{5}(x - 5)$  406) through: (2, 5), perp. to  $y = -\frac{2}{5}x - 5$   $y - 5 = \frac{5}{2}(x - 2)$

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

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

409) through: (5, -4), perp. to  $y = \frac{5}{8}x - 5$   $y + 4 = -\frac{8}{5}(x - 5)$  410) through: (5, -4), perp. to  $y = 5x - 4$   $y + 4 = -\frac{1}{5}(x - 5)$

411) through: (-4, 4), perp. to  $y = 4x - 3$   $y - 4 = -\frac{1}{4}(x + 4)$  412) through: (-1, 1), perp. to  $y = -\frac{1}{3}x - 5$   
 $y - 1 = 3(x + 1)$

- 413) through:  $(-3, 5)$ , perp. to  $y = \frac{1}{2}x - 1$   
 $y - 5 = -2(x + 3)$
- 414) through:  $(-2, 2)$ , perp. to  $y = -\frac{3}{5}x + 3$   $y - 2 = \frac{5}{3}(x + 2)$
- 415) through:  $(4, 0)$ , perp. to  $y = \frac{4}{5}x - 2$   $y = -\frac{5}{4}(x - 4)$  416) through:  $(-4, 1)$ , perp. to  $y = -4x$   $y - 1 = \frac{1}{4}(x + 4)$
- 417) through:  $(2, 0)$ , perp. to  $y = \frac{2}{3}x + 3$   $y = -\frac{3}{2}(x - 2)$  418) through:  $(0, -1)$ , perp. to  $y = \frac{1}{3}x - 4$   
 $y + 1 = -3x$
- 419) through:  $(4, 3)$ , perp. to  $y = -5x + 2$   $y - 3 = \frac{1}{5}(x - 4)$  420) through:  $(1, -5)$ , perp. to  $y = \frac{1}{5}x + 4$   
 $y + 5 = -5(x - 1)$
- 421) through:  $(-2, -2)$ , perp. to  $y = -x - 5$  422) through:  $(-2, 5)$ , perp. to  $x = 0$   
 $y - 5 = 0$
- 423) through:  $(5, 4)$ , perp. to  $y = -\frac{5}{3}x - 3$   $y - 4 = \frac{3}{5}(x - 4)$  424) through:  $(4, -5)$ , perp. to  $y = \frac{2}{5}x - 3$   $y + 5 = -\frac{5}{2}(x - 4)$
- 425) through:  $(3, 4)$ , perp. to  $y = \frac{1}{2}x + 4$  426) through:  $(5, 0)$ , perp. to  $y = x - 5$   
 $y = -(x - 5)$
- 427) through:  $(0, -2)$ , perp. to  $y = \frac{3}{5}x + 1$   $y + 2 = -\frac{5}{3}x$  428) through:  $(5, 1)$ , perp. to  $y = 3x + 1$   $y - 1 = -\frac{1}{3}(x - 5)$
- 429) through:  $(3, 5)$ , perp. to  $y = -\frac{3}{4}x - 3$   $y - 5 = \frac{4}{3}(x - 3)$  430) through:  $(-5, 0)$ , perp. to  $y = 5x$   $y = -\frac{1}{5}(x + 5)$
- 431) through:  $(-1, -3)$ , perp. to  $y = -x - 4$  432) through:  $(2, -1)$ , perp. to  $y = -\frac{2}{3}x + 2$   $y + 1 = \frac{3}{2}(x - 2)$   
 $y + 3 = x + 1$
- 433) through:  $(-3, 2)$ , perp. to  $y = \frac{3}{2}x + 2$   $y - 2 = -\frac{2}{3}(x + 3)$  434) through:  $(-1, 0)$ , perp. to  $y = -\frac{1}{5}x$   
 $y = 5(x + 1)$
- 435) through:  $(2, 4)$ , perp. to  $y = -\frac{2}{7}x$   $y - 4 = \frac{7}{2}(x - 2)$  436) through:  $(4, -3)$ , perp. to  $y = -1$   
 $0 = x - 4$
- 437) through:  $(3, -3)$ , perp. to  $y = \frac{3}{7}x + 2$   $y + 3 = -\frac{7}{3}(x - 3)$  438) through:  $(3, 3)$ , perp. to  $y = -\frac{3}{4}x + 5$   $y - 3 = \frac{4}{3}(x - 3)$

439) through: (3, 1), perp. to  $y = -\frac{3}{5}x - 4$   $y - 1 = \frac{5}{3}(x - 4)$  440) through: (-5, -1), perp. to  $y = -\frac{5}{4}x + 5$   $y + 1 = \frac{4}{5}(x + 5)$

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

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

443) through: (-4, -2), perp. to  $y = -2x$   $y + 2 = \frac{1}{2}(x + 4)$  444) through: (-1, -4), perp. to  $y = -x - 2$   
 $y + 4 = x + 1$

445) through: (-3, 1), perp. to  $x = 0$   
 $y - 1 = 0$

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

$y + 4 = -2(x - 4)$

447) through: (-3, -3), perp. to  $y = -\frac{3}{5}x + 4$   $y + 3 = \frac{5}{3}(x + 3)$  448) through: (4, -5), perp. to  $y = 3x + 3$   $y + 5 = -\frac{1}{3}(x - 4)$

449) through: (3, 1), perp. to  $y = -\frac{3}{4}x + 4$   $y - 1 = \frac{4}{3}(x - 3)$  450) through: (-2, -2), perp. to  $x = 0$   
 $y + 2 = 0$

451) through: (-5, -3), perp. to  $y = 4$   
 $0 = x + 5$

452) through: (-1, 4), perp. to  $y = \frac{1}{6}x - 5$

$y - 4 = -6(x + 1)$

453) through: (-1, 0), perp. to  $y = x$   
 $y = -(x + 1)$

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

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

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

457) through: (-5, 3), perp. to  $y = \frac{5}{7}x + 4$   $y - 3 = -\frac{7}{5}(x - 5)$  458) through: (1, -2), perp. to  $y = \frac{1}{6}x - 5$

$y + 2 = -6(x - 1)$

459) through: (-2, 1), perp. to  $y = -2x + 3$   $y - 1 = \frac{1}{2}(x + 2)$  460) through: (1, 3), perp. to  $y = -\frac{1}{5}x + 2$

$y - 3 = 5(x - 1)$

461) through: (-4, -4), perp. to  $y = -\frac{7}{8}x - 4$   $y + 4 = \frac{8}{7}(x - 4)$  462) through: (2, -3), perp. to  $y = \frac{2}{7}x - 1$   $y + 3 = -\frac{7}{2}(x - 2)$

463) through: (-3, 5), perp. to  $y = \frac{8}{9}x + 4$   $y - 5 = -\frac{9}{8}(x - 4)$  464) through: (-1, -2), perp. to  $y = -\frac{1}{5}x$

$y + 2 = 5(x + 1)$

465) through: (3, 1), perp. to  $y = 8x - 5$   $y - 1 = -\frac{1}{8}(x - 3)$  466) through: (-3, 1), perp. to  $y = \frac{3}{2}x + 3$   $y - 1 = -\frac{2}{3}(x + 3)$

467) through: (-1, 5), perp. to  $y = \frac{3}{5}x + 5$   $y - 5 = -\frac{5}{3}(x + 1)$  468) through: (2, 2), perp. to  $y = \frac{2}{3}x - 1$   $y - 2 = -\frac{3}{2}(x - 2)$

469) through: (-4, -1), perp. to  $y = -\frac{4}{5}x - 3$   $y + 1 = \frac{5}{4}(x + 4)$  470) through: (-5, 2), perp. to  $y = -\frac{5}{2}x + 3$   $y - 2 = \frac{2}{5}(x + 5)$

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

472) through: (-1, 5), perp. to  $y = x + 4$   
 $y - 5 = -(x + 1)$

473) through: (-1, -5), perp. to  $y = -x + 2$   
 $y + 5 = x + 1$

474) through: (5, 4), perp. to  $y = -\frac{5}{8}x + 4$   $y - 4 = \frac{8}{5}(x - 5)$

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

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

477) through: (2, 4), perp. to  $y = 2x + 1$   $y - 4 = -\frac{1}{2}(x - 2)$  478) through: (2, 2), perp. to  $y = 2x + 3$   $y - 2 = -\frac{1}{2}(x - 2)$

479) through: (4, -2), perp. to  $y = \frac{2}{3}x - 1$   $y + 2 = -\frac{3}{2}(x - 4)$  480) through: (-2, 2), perp. to  $y = x - 2$   
 $y - 2 = -(x + 2)$

481) through: (-5, 4), perp. to  $y = \frac{5}{6}x - 2$   $y - 4 = -\frac{6}{5}(x + 5)$  482) through: (5, 2), perp. to  $x = 0$   
 $y - 2 = 0$

483) through: (-5, -2), perp. to  $y = -\frac{5}{2}x - 3$   $y + 2 = \frac{2}{5}(x + 5)$  484) through: (2, 5), perp. to  $y = -x - 2$   
 $y - 5 = x - 2$

485) through: (-2, -4), perp. to  $y = -2x + 4$   $y + 4 = \frac{1}{2}(x + 2)$  486) through: (5, 2), perp. to  $y = -\frac{5}{7}x - 1$   $y - 2 = \frac{7}{5}(x - 5)$

487) through: (-4, 0), perp. to  $y = -4x + 1$   $y = \frac{1}{4}(x + 4)$  488) through: (1, -3), perp. to  $y = -\frac{1}{2}x - 4$

$y + 3 = 2(x - 1)$

489) through: (-1, 1), perp. to  $y = 2x + 2$   $y - 1 = -\frac{1}{2}(x + 1)$  490) through: (4, 3), perp. to  $y = -\frac{4}{5}x + 1$   $y - 3 = \frac{5}{4}(x - 4)$

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

$$y + 2 = -2(x - 2)$$

493) through: (-1, 2), perp. to  $y = \frac{1}{7}x - 1$

$$y - 2 = -7(x + 1)$$

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

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

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

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

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

$$y - 5 = 7(x + 3)$$

498) through: (5, 4), perp. to  $y = -\frac{1}{8}x - 2$

$$y - 4 = 8(x - 5)$$

499) through: (3, -4), perp. to  $y = -\frac{2}{9}x - 4$   $y + 4 = \frac{9}{2}(x - 3)$

500) through: (5, -5), perp. to  $y = \frac{5}{8}x + 4$   $y + 5 = -\frac{8}{5}(x - 5)$