Point-slope form Name_____

Date_____

Write the slope-intercept form of the equation of each line.

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

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

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

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

Write the point-slope form of the equation of the line described.

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

6) through: $(4, 2)$, parallel to $y = x + 2$

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

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

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

10) through: $(1, -2)$, perp. to $y = -5$

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

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

Answers to

1) $y = -3x + 2$

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

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

4) $y = -2x - 4$

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

6) $y - 2 = x - 4$

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

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

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

10) $0 = x - 1$

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

12) $y + 4 = -7(x + 1)$