Point-slope form Name_____

Date_____

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

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

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

3) through: $(-1, -5)$, slope = 8

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

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

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

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

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

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

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

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

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

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

Answers to

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

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

3) $y + 5 = 8(x + 1)$

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

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

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

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

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

9) $y - 3 = x - 2$

10) $y = 0$

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

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