Key

Writing Linear Equations

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

1) $3x - 2y = -16$

$$\frac{-3x \qquad -3x}{}$$
$$\frac{-2y}{-2} = \frac{-3x}{-2} \frac{-16}{-2}$$

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

2) $13x - 11y = -12$

$$\frac{-13x \qquad -13x}{}$$
$$\frac{-11y}{-11} = \frac{-13x}{-11} \frac{-12}{-11}$$

$$y = \frac{13}{11}x + \frac{12}{11}$$

3) $9x - 7y = -7$

$$\frac{-9x \qquad -9x}{}$$
$$\frac{-7y}{-7} = \frac{-9x}{-7} \frac{-7}{-7}$$

$$y = \frac{9}{7}x + 1$$

4) $x - 3y = 6$

$$\frac{-x \qquad -x}{}$$
$$\frac{-3y}{-3} = \frac{-x}{-3} \frac{+6}{-3}$$

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

5) $6x + 5y = -15$

$$\frac{-6x \qquad -6x}{}$$
$$\frac{5y}{5} = \frac{-6x}{5} \frac{-15}{5}$$

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

6) $4x - y = 1$

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

$$y = 4x - 1$$

7) $11x - 4y = 32$

$$\frac{-11x \qquad -11x}{}$$
$$\frac{-4y}{-4} = \frac{-11x}{-4} \frac{+32}{-4}$$

$$y = \frac{11}{4}x - 8$$

8) $11x - 8y = -48$

$$\frac{-11x \qquad -11x}{}$$
$$\frac{-8y}{-8} = \frac{-11x}{-8} \frac{-48}{-8}$$

$$y = \frac{11}{8}x + 6$$