

Alg 1 4.3

Standard form

↓  
no fractions (decimals)  
in order  $Ax + By = C$   
↑  
POS.

$$\begin{array}{r} y = 2x + 5 \\ -2x \quad -2x \\ \hline \end{array}$$

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

$$2x - y = -5$$

$$\begin{array}{r} y = -3x + 7 \\ +3x \quad +3x \\ \hline \end{array}$$

$$3x + y = 7$$

$$4 \cdot y = 4 \cdot \frac{1}{4}x + 4 \cdot 3$$

$$\begin{array}{r} 4y = 1x + 12 \\ -1x \quad -1x \end{array}$$

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$$\begin{array}{r} -1x + 4y = 12 \\ \underline{-1} \quad \underline{-1} \quad \underline{-1} \end{array}$$

$$x - 4y = -12$$

$$3 \cdot y = 3 \cdot \frac{2}{3}x + 3 \cdot 6$$

$$\begin{array}{r} 3y = 2x + 18 \\ -2x \quad -2x \end{array}$$

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$$\begin{array}{r} -2x + 3y = 18 \\ \underline{-1} \quad \underline{-1} \quad \underline{-1} \end{array}$$

$$2x - 3y = -18$$

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

$$\begin{array}{r} 4y = 1x - 2 \\ -1x \quad -1x \\ \hline \frac{-1x + 4y}{-1} = \frac{-2}{-1} \\ x - 4y = 2 \end{array}$$

$$(1.5x) - 3y = 4.2$$

$$10. \quad 1 \frac{5}{10} x - 3y = 4 \frac{2}{10}$$

$$10 \frac{50}{10} \\ 15x - 30y = 40 \frac{20}{10}$$

$$\frac{15x - 30y}{3} = \frac{42}{3}$$

$$5x - 10y = 14$$

$$22. \quad m = 15 \quad b = ?$$

$$(9, 195)$$

x      y

$$y - y_1 = m(x - x_1)$$
$$(y - 195) = 15(x - 9)$$
$$y - 195 = 15x - 135$$
$$\begin{array}{r} y - 195 = 15x - 135 \\ +195 \qquad \qquad +195 \\ \hline y = 15x + 60 \end{array}$$

$$\textcircled{23} \quad m = .5 \quad (48, 64)$$

$$y - 64 = 0.5(x - 48)$$

$$\begin{array}{r} y - 64 = 0.5x - 24 \\ +64 \qquad \qquad +64 \end{array}$$

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$$y = 0.5x + 40$$

p. 236

12-34e