

**Warm up:**

Simplify.

1)  $4(7x + 9) = 28x + 36$

2)  $-3(2x - 5) = -6x + 15$

3) Four less than two thirds of a number is 14.  
Find the number.

$$\begin{aligned} \frac{2}{3}x - 4 &= 14 \\ &+4 \quad +4 \\ \hline \frac{2}{3} \left( \frac{2}{3}x \right) &= \left( 18 \right) \end{aligned}$$

-1/2

$$x = 27$$

# HW Solutions

$$2x + 3x$$

$$5x$$

**like terms** have the same variables to the same powers

$$\begin{array}{l} 2x \\ -7x \\ \frac{3}{4}x \\ -5.2x \end{array} \Bigg|$$

$$\begin{array}{l} 5 \\ -12 \\ 2\frac{1}{3} \\ 0.4 \\ -3.952 \end{array} \Bigg|$$

$$\begin{array}{l} 3x^2 \\ -4x^2 \\ -\frac{5}{9}x^2 \\ 2.55x^2 \end{array}$$

$$\underline{4a} + 7 + \underline{6a}$$

$$10a + 7$$

$$\underline{3n} - \underline{4} - \underline{8n} + \underline{6}$$

$$-5n + 2$$

$$\underline{-5x} + 6y - 3 - \underline{x} + 9y$$

$$\begin{array}{r} -5x - x \\ -5 - 1 \\ -5 + (-1) \\ -6 \end{array}$$

$$-6x + 15y - 3$$

$$4 + \underline{2(5x - 3)}$$

$$4 + 10x - 6$$

$$-2 + 10x$$

$$10x - 2$$



$$3x - \underline{4}(2x - \underline{7})$$

$$\underline{3x} - \underline{8x} + 28$$

$$\textcircled{-5x + 28}$$

1)  $-3t + 7t$

2)  $5.4n - 3.9 - 2.9n - 1.6$

3)  $-3\frac{1}{5}w + 6 + w$

4)  $-6 - 2.3(4x + 3)$

5)  $x + 3(6x + 2)$

6)  $\frac{1}{2}b - \frac{3}{5}(2b - 5)$

$$1) -3t + 7t$$

$$4t$$

$$2) \underline{5.4n} - \underline{3.9} - \underline{2.9n} - \underline{1.6}$$

$$2.5n - 5.5$$

$$\begin{array}{r} -3.9 - 1.6 \\ -3.9 + (-1.6) \\ 3.9 \\ + 1.6 \\ \hline 5.5 \end{array}$$

$$3) \quad \underline{-3\frac{1}{5}w + 6} + \underline{w}$$

$$\underline{-2\frac{1}{5}w + 6}$$

$$-3\frac{1}{5} + 1$$

$$-2\frac{1}{5}$$

$$-\frac{16}{5} + \frac{5}{5} = -\frac{11}{5}$$

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

$$4) -6 - 2.3(4x + 3)$$

$$\underline{-6} - 9.2x - \underline{6.9}$$

$$\underline{-9.2x - 12.9}$$

$$\begin{array}{r} 2.3 \\ \times 4 \\ \hline 9.2 \end{array}$$

$$5) x + 3(6x + 2)$$

$$\underline{x} + \underline{18x} + 6$$

$$\underline{19x + 6}$$

$$\frac{1}{5} - \frac{1}{10} = -\frac{7}{10} \quad 6) \quad \frac{1}{2}b - \frac{3}{5}(2b - 5)$$

$$\frac{1}{2}b - \frac{6}{5}b + \frac{15}{5}$$

$$-\frac{7}{10}b + 3$$



