

**Warm up:**

Simplify.

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

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

$$-6x + (+15)$$

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

$$\frac{2}{3}x - 4 = 14$$

$$\quad \quad \quad +4 \quad +4$$


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$$\frac{3}{2} \left( \frac{2}{3}x \right) = \frac{3}{2} (18)$$

$$x = 27$$

## HW Solutions

$$\textcircled{6} \quad 32ab - 26a$$

$$2a(16b - 13)$$

$$\textcircled{7} \quad 42m + 18mn$$

$$6m(7 + 3n)$$

$$\textcircled{3} \quad 5a(4b^2 - 3b + 1)$$

$$20ab^2 - 15ab + 5a$$

$$\textcircled{3} \quad 16x^2y - 20xy + 44y$$

$$4y(4x^2 - 5x + 11)$$

$$2x + 3x$$

$$5x$$

$$2(9) + 3(9)$$

$$18 + 27$$

$$45 = 5(9)$$

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

$$2x$$

$$-7x$$

$$\frac{3}{4}x$$

$$-9.65x$$

$$5$$

$$-3$$

$$8.18$$

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

$$8x^2$$

$$-2x^2$$

$$\frac{2}{3}x^2$$

$$-0.5x^2$$

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

$$10a + 7$$



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

$$-5n + 2$$

$$\underbrace{-5x}_{\text{mm}} + \underbrace{6y}_{\text{mm}} - 3 \quad \underbrace{-x}_{\text{mm}} + \underbrace{9y}_{\text{mm}}$$

$$15y - 6x - 3$$

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

$$4 + 2(5x - 3)$$

$$\underline{4} + 10x - \underline{6}$$

$$\textcircled{10x - 2}$$

$$3x - 4(2x - 7)$$

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

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

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

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

$$4t$$

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

$$2.5n - 5.5$$

$$\begin{array}{r} 4 \cancel{5} .4 \\ - 2.9 \\ \hline 2.5 \end{array}$$

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

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



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

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

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

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