

# HW 4 Algebra Solutions

11.  $h = 100$

$$10h + 6h + 3h$$

$$10 \cdot 100 + 6 \cdot 100 + 3 \cdot 100$$

$$1000 + 600 + 300$$

$$\boxed{1900}$$

12.  $w = 7$

$$8w + 12w + 5w$$

$$8 \cdot 7 + 12 \cdot 7 + 5 \cdot 7$$

$$56 + 84 + 35$$

$$\boxed{175}$$

13.  $R = 1,000$

$$5k + 10k - 2k$$

$$5(1000) + 10 \cdot 1000 - 2 \cdot 1000$$

$$5,000 + 10,000 - 2,000$$

$$\boxed{13,000}$$

14.  $d = 12$

$$8d - 3d + 6d$$

$$8 \cdot 12 - 3 \cdot 12 + 6 \cdot 12$$

$$96 - 36 + 72$$

$$\boxed{132}$$

15.  $x = 10$

$$\textcircled{1} 6x + 2x - x$$

$$6 \cdot 10 + 2 \cdot 10 - 10$$

$$60 + 20 - 10$$

$$\boxed{70}$$

16.  $x = 6$

$$\textcircled{2} \frac{1}{2}x + 4x - 8$$

$$\frac{1}{2} \cdot \frac{6}{1} = \frac{6}{2}$$

$$\frac{-3}{-3}$$

$$\frac{1}{2} \cdot 6 + 4 \cdot 6 - 8$$

$$3 + 24 - 8$$

$$\boxed{19}$$

\textcircled{3}  $5x - 5$

$$5 \cdot 10 - 5$$

$$50 - 5$$

$$\boxed{45}$$

\textcircled{4}  $3x + 5x + 2x - x$

$$3 \cdot 6 + 5 \cdot 6 + 2 \cdot 6 - 6$$

$$18 + 30 + 12 - 6$$

$$60 - 6$$

$$\boxed{54}$$