

8th Grade  
1.5 Combining Like Terms

$$5x + 6x \quad \text{use distributive property}$$

$$(5+6)x = 11x \quad \text{do this mentally, it will be quicker}$$

$$2y^2 - 7y^2 \quad \text{A simplified expression}$$

$$(2-7)y^2 = -5y^2$$

- no grouping symbols (distribute)
- like terms combined

$$\text{ex) } 4(n+9) - 3(2+n)$$

$$\underline{4n} + \underline{36} - \underline{6} - \underline{3n}$$

$$|n + 30$$

$$\boxed{n + 30}$$

$$\text{ex) } (s-3)(-2) + 17s$$

$$\downarrow$$

$$\underline{-2s} + \underline{6} + \underline{17s}$$

$$\boxed{15s + 6}$$

More Practice

$$1. \quad 6y - 1y = \boxed{5y}$$

$$2. \quad (4a-1)2 + a$$

$$\underline{8a} - \underline{2} + \underline{a} = \boxed{9a - 2}$$

$$3. \quad 7(w-5) - 3\left(2w - \frac{1}{3}\right)$$

$$\underline{7w} - \underline{35} - \underline{6w} + \underline{1}$$

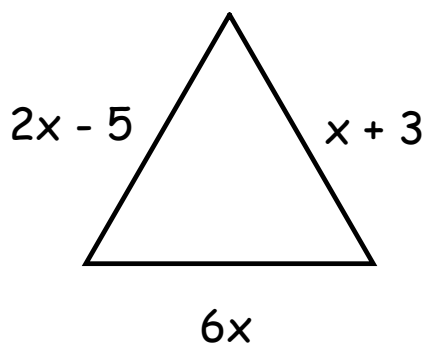
$$\boxed{w - 34}$$

$$\frac{3}{1} \cdot \frac{1}{3} = \frac{3}{3} = 1$$

Try this:

$$\begin{aligned}
 & 5(6 + n) - 2(n - 2) \\
 & \underline{30} + \underline{5n} - \underline{2n} + \underline{4} \\
 & \boxed{34 + 3n} \\
 & \text{or} \\
 & 3n + 34
 \end{aligned}$$

Write an expression in simplest form for the perimeter of the figure.



$$\begin{aligned}
 & \underline{2x - 5} + \underline{x + 3} + \underline{6x} \\
 & \boxed{9x - 2}
 \end{aligned}$$

# Homework:

pg 472; 10-15, 38-49, 55