

**Lesson 1.3.2: Adding and Subtracting Polynomials****Georgia Standard of Excellence**

MGSE9–12.A.APR.1

**Warm-Up 1.3.2 Debrief**

1.  $a = 5$ ,  $b = 12$ , and  $c = 20$

Recall that the perimeter of a triangle =  $a + b + c$ .Replace the values of  $a$ ,  $b$ , and  $c$  in the formula for perimeter.

$$\text{perimeter} = a + b + c$$

$$\text{perimeter} = 5 + 12 + 20$$

$$\text{perimeter} = 37 \quad \text{Simplify.}$$

The perimeter is 37 feet.

2.  $a = 8$ ,  $b = x$ , and  $c = 15$

Replace the values of  $a$ ,  $b$ , and  $c$  in the formula for perimeter.

$$\text{perimeter} = 8 + x + 15$$

$$\text{perimeter} = 23 + x \quad \text{Combine like terms.}$$

The perimeter is  $(23 + x)$  feet.

3.  $a = x$ ,  $b = 1$ , and  $c = 6$

Replace the values of  $a$ ,  $b$ , and  $c$  in the formula for perimeter.

$$\text{perimeter} = x + 1 + 6$$

$$\text{perimeter} = x + 7 \quad \text{Combine like terms.}$$

The perimeter is  $(x + 7)$  feet.**Connection to the Lesson**

- Students will extend their understanding of finding sums and differences to finding sums and differences of polynomial expressions.
- Students will substitute given values for the variables in formulas.