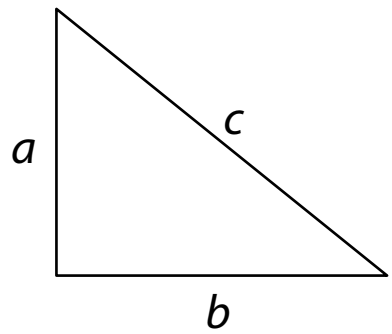
Lesson 1.3.2: Adding and Subtracting Polynomials

Warm-Up 1.3.2

Penelope is a playground designer. She's considering different sizes of a triangular climbing wall for her latest project. Penelope has drawn up three potential designs for the climbing wall, each with different side lengths. For each design, she needs to determine the perimeter of the climbing wall in order to know how much material will be needed to build it. The perimeter of a triangle is the sum of the lengths of the three sides. Help Penelope by finding the perimeter of a climbing wall with each of the given side lengths. Write the perimeter in the simplest expression possible. All side lengths are in feet.



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

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

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