

12.1, number 67: **Find the perimeter of the triangle with vertices**
 $A = (-1, 2, 1)$, $B = (1, -1, 3)$, **and** $C = (3, 4, 5)$.

Answer: The distance from A to B is $\sqrt{4 + 9 + 4}$. The distance from B to C is $\sqrt{4 + 25 + 4}$. The distance from C to A is $\sqrt{16 + 4 + 16}$. The perimeter of the triangle is

$$\boxed{\sqrt{17} + \sqrt{33} + 6}.$$