## Possible Solutions

The coordinates of the vertices of the triangle shown are $\mathrm{A}(-6,2), \mathrm{B}(6,2), \mathrm{C}(6,-3)$.


What is the length of segment $A C$ in units?

- Count the distance from A to B which is 12 .
- Then count the distance from B to C which is 5 .
- Use these two lengths and the Pythagorean Theorem to find the distance from $A$ to $C$ as shown below.

$$
\begin{gathered}
5^{2}+12^{2}=c^{2} \\
25+144=c^{2} \\
169=c^{2} \\
\sqrt{169}=\sqrt{c^{2}} \\
c=13
\end{gathered}
$$

The solution is 13 units.

