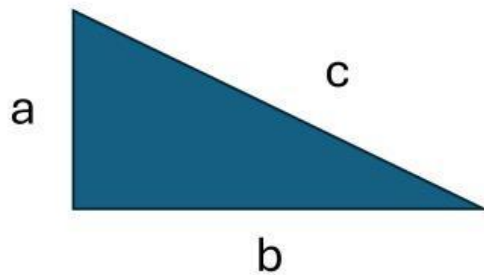
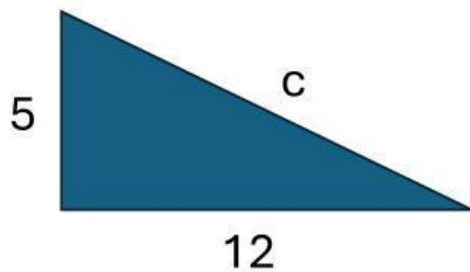


Using Pythagorean Theorem to find the Unknown Side of a Triangle



$$a^2 + b^2 = c^2$$



$$5^2 + 12^2 = c^2$$

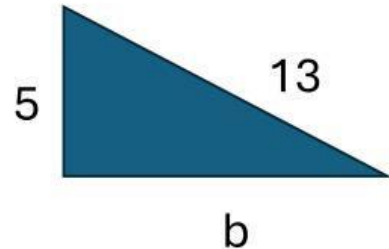
$$c^2 = 5^2 + 12^2$$

$$c^2 = 25 + 144$$

$$c^2 = 169$$

$$c = \sqrt{169}$$

$$c = 13$$



$$a^2 + b^2 = c^2$$

$$\begin{array}{r} -(5^2) \quad \quad -(5^2) \\ 5^2 + b^2 = 13^2 \end{array}$$

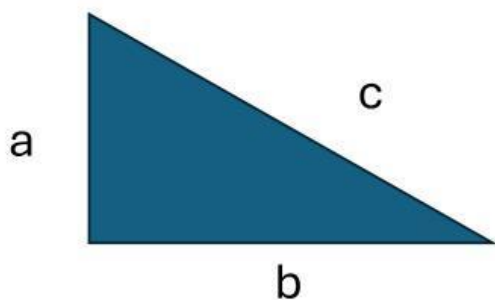
$$b^2 = 13^2 - 5^2$$

$$b^2 = 169 - 25$$

$$b^2 = 144$$

$$b = \sqrt{144} \quad b = 12$$

Find the length of the missing sides.



$$a = 7 \quad b = 24 \quad c =$$

$$a = 8 \quad b = \quad c = 17$$

$$a = \quad b = 40 \quad c = 41$$

$$a = 11 \quad b = 60 \quad c =$$

$$a = 12 \quad b = \quad c = 37$$

$$a = \quad b = 21 \quad c = 29$$