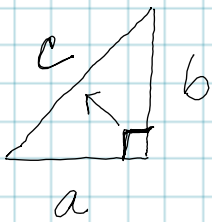
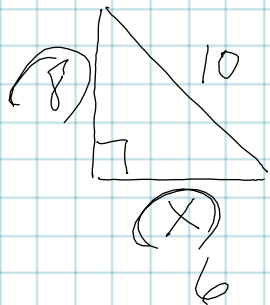


* Find the length of the side of the right triangle represented by the variable.



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

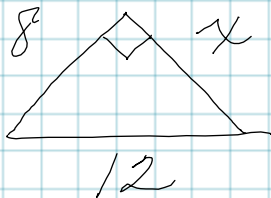


$$\begin{aligned} 8^2 + x^2 &= 10^2 \\ 64 + x^2 &= 100 \\ \underline{-100} \quad \quad \underline{-100} \end{aligned}$$

$$\begin{aligned} x^2 - 36 &= 0 \\ (x+6)(x-6) &= 0 \end{aligned}$$

$$x = \cancel{-6}, 6$$

$$x = 6$$



$$\begin{aligned} 8^2 + x^2 &= 12^2 \\ 64 + x^2 &= 144 \\ \underline{-144} \quad \quad \underline{-144} \end{aligned}$$

~~$x^2 - 80 = 0$~~

$$\begin{aligned} 64 + x^2 &= 144 \\ \underline{-64} \quad \quad \underline{-64} \end{aligned}$$

$$x^2 = 80$$

x is a square root of 80

$$x = \textcircled{+} \sqrt{80}$$

$$x = \sqrt{80} = \sqrt{16 \cdot 5}$$

$$x = 4\sqrt{5}$$