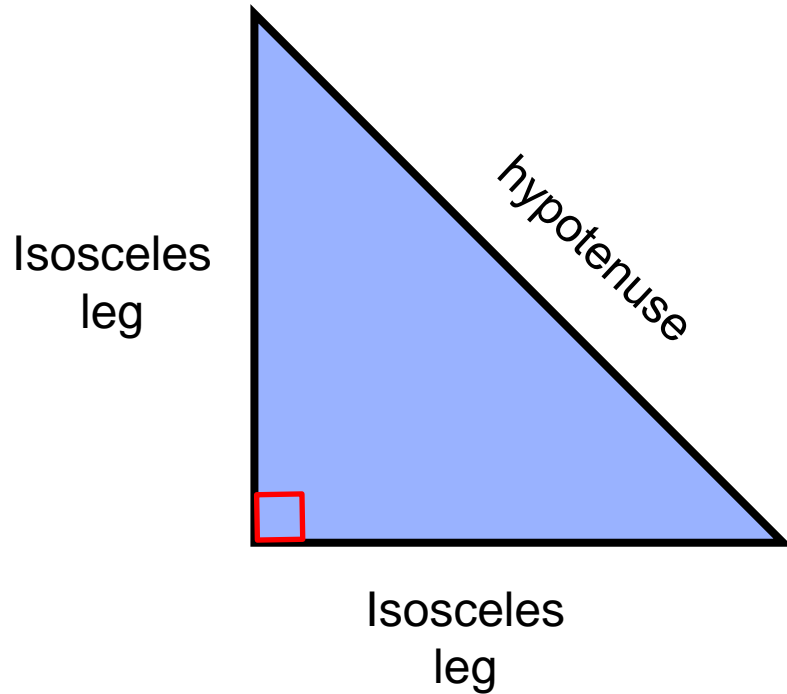


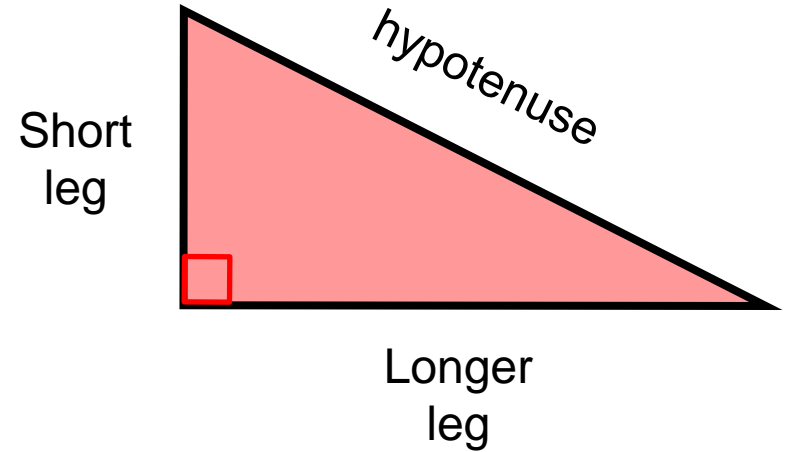
$45^\circ-45^\circ-90^\circ$

Triangle Theorem



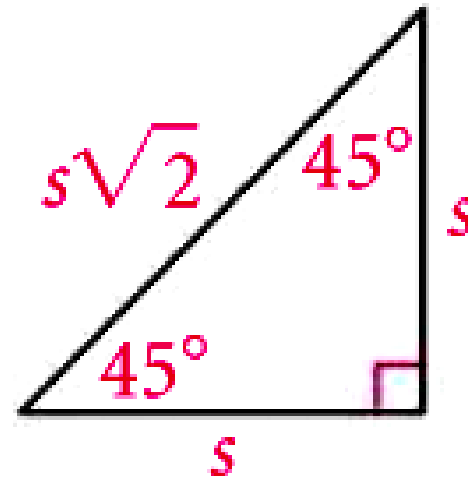
$30^\circ-60^\circ-90^\circ$

Triangle Theorem

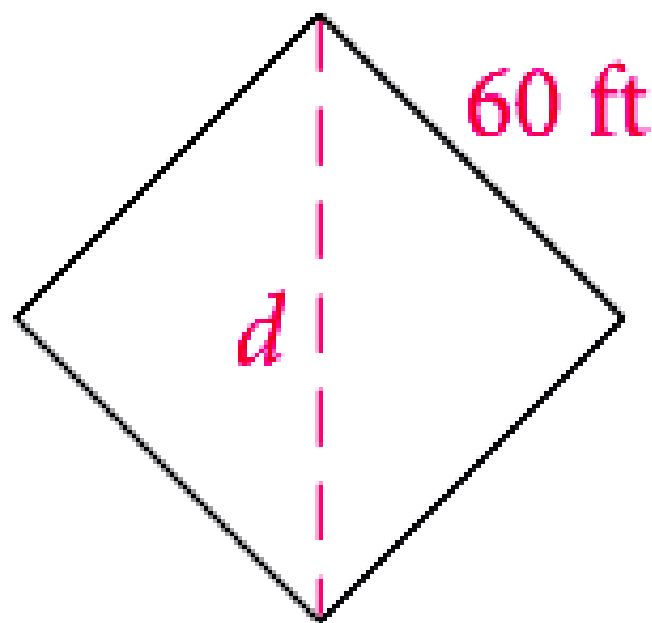


$$\text{hypotenuse} = \sqrt{2} \cdot \text{leg}$$

45°-45°-90° Triangle Theorem



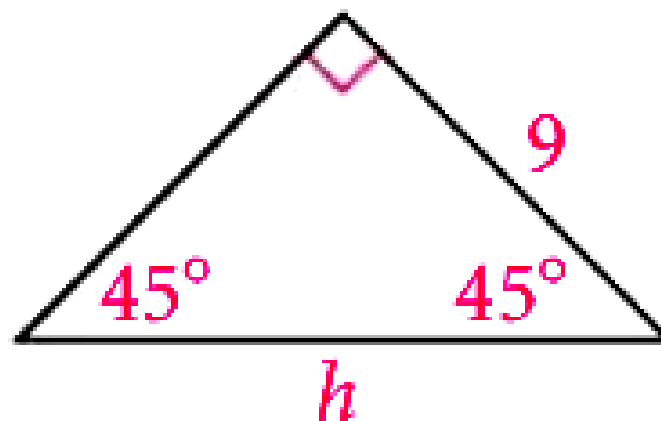
Softball A high school softball diamond is a square.
The distance from base to base is 60 ft.
To the nearest foot, how far does a catcher throw the
ball from home plate to second base?



Find the value of each variable.

45° - 45° - 90°

Triangle Theorem



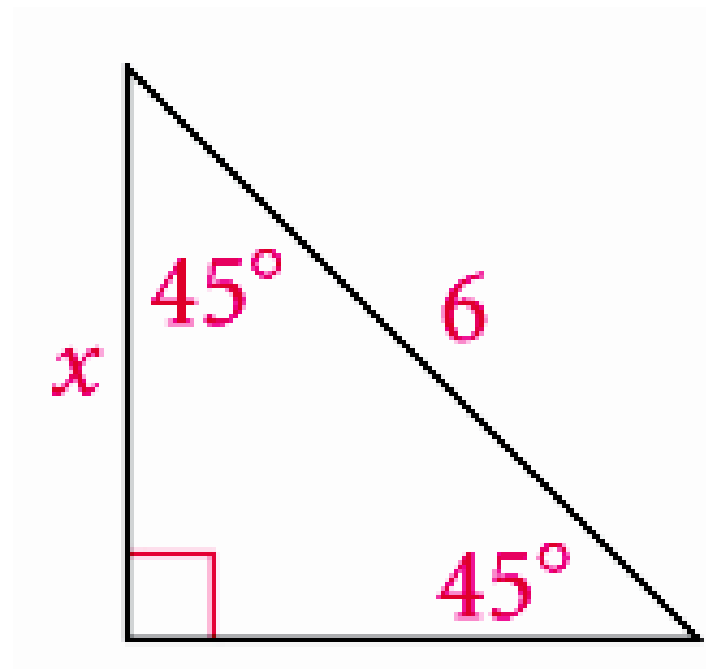
Multiple Choice What is the value of x ?

(A) 3

(B) $3\sqrt{2}$

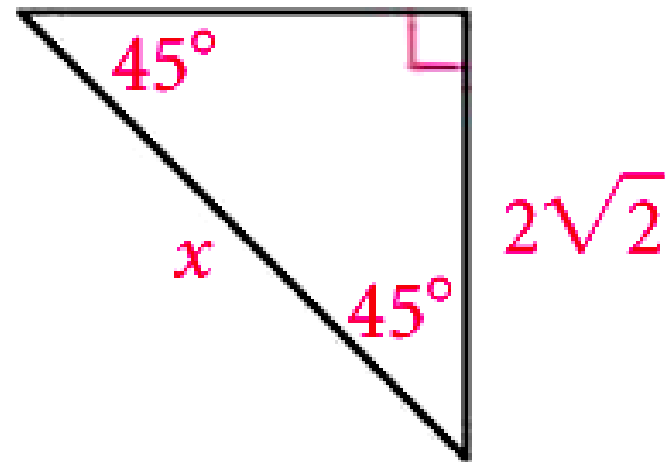
(C) 6

(D) $6\sqrt{2}$



Find the value of each variable.

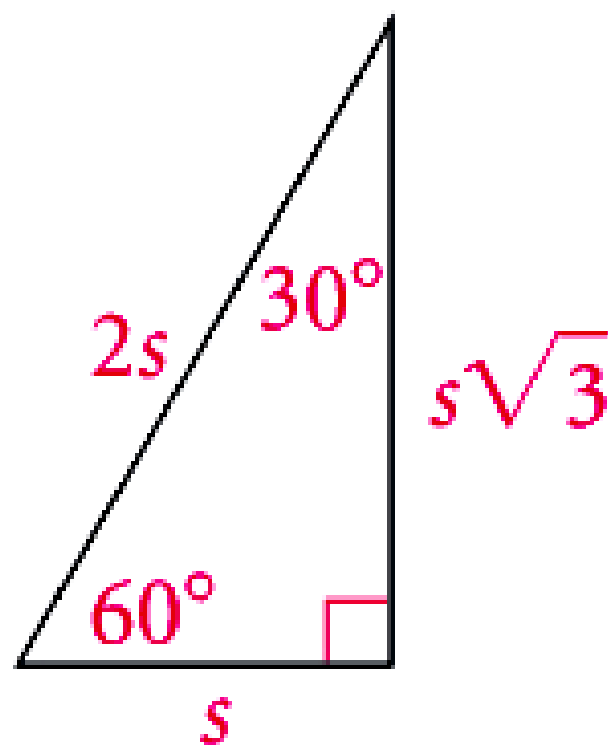
**45° - 45° - 90°
Triangle Theorem**



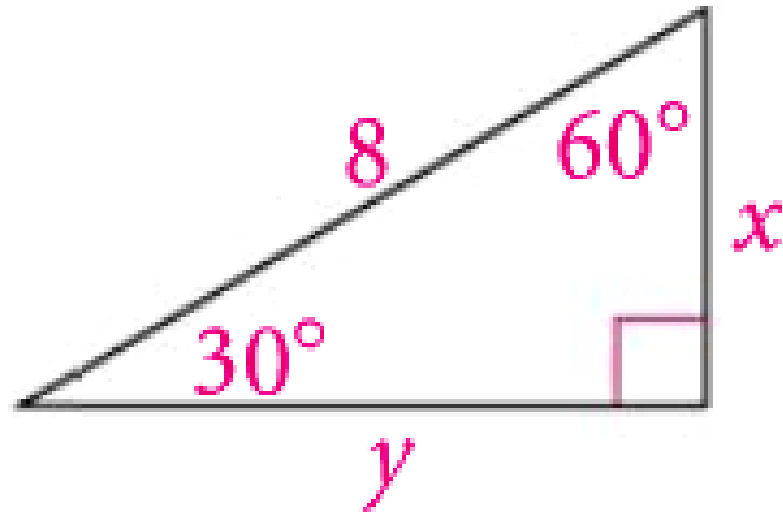
**30°-60°-90°
Triangle Theorem**

hypotenuse = $2 \cdot$ shorter leg

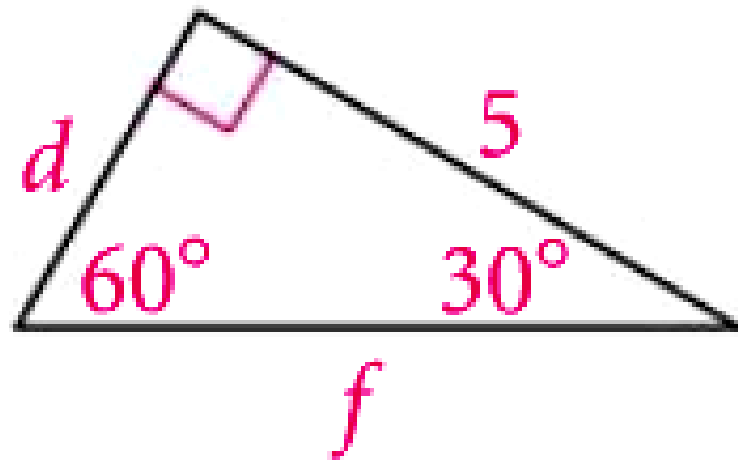
longer leg = $\sqrt{3} \cdot$ shorter leg



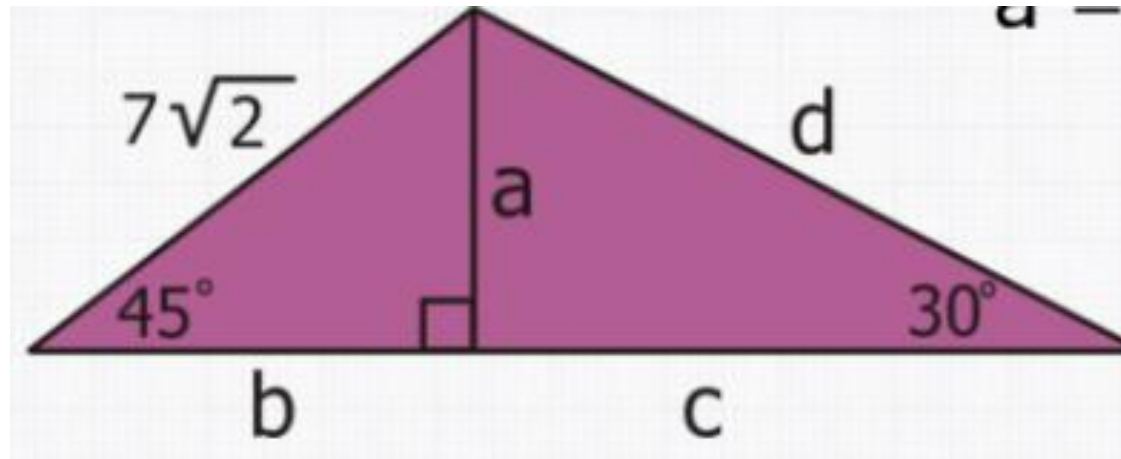
Using the Length of One Side



Using the Length of One Side

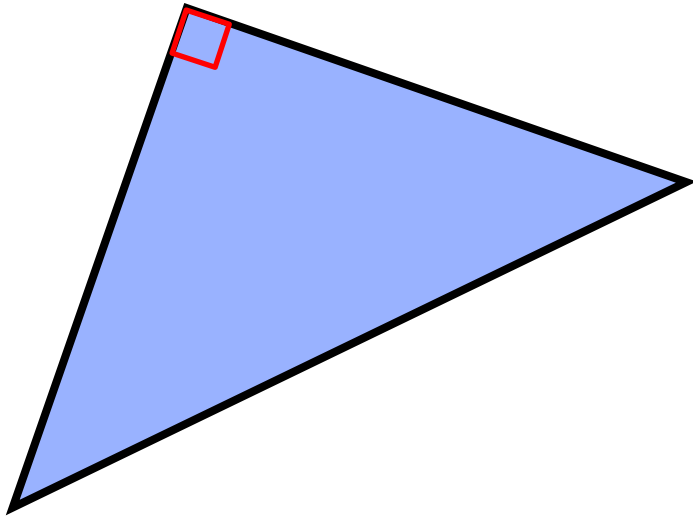


Find the *perimeter* of the largest triangle



45° - 45° - 90°

Triangle Theorem



30° - 60° - 90°

Triangle Theorem

