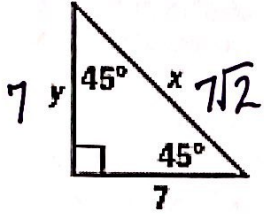


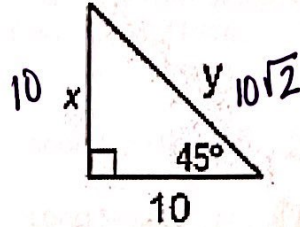
Day 3 - Discovering 45-45-90 Triangles - Practice

Directions: Find the value of given variables.

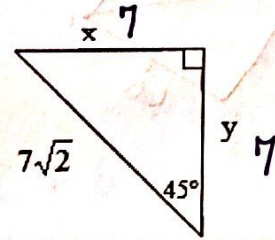
1.



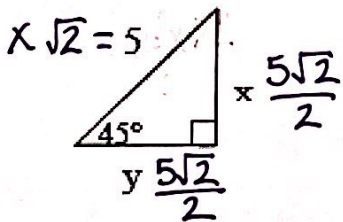
2.



3.



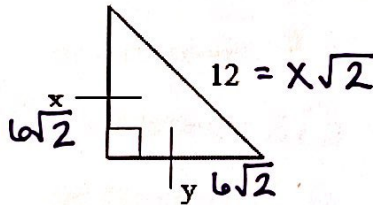
4.



$$\frac{x\sqrt{2}}{\sqrt{2}} = \frac{5}{\sqrt{2}}$$

$$x = \frac{5}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \boxed{\frac{5\sqrt{2}}{2}}$$

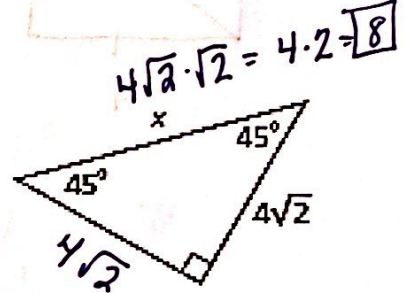
5.



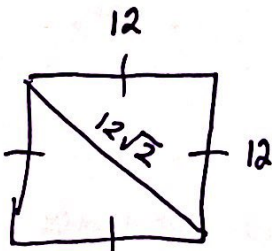
$$\frac{x\sqrt{2}}{\sqrt{2}} = \frac{12}{\sqrt{2}}$$

$$x = \frac{12}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{12\sqrt{2}}{2} = 6\sqrt{2}$$

6.

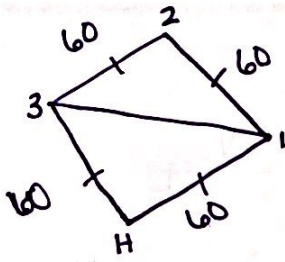


7. The perimeter of a square is 48 centimeters. Find the length of a diagonal.



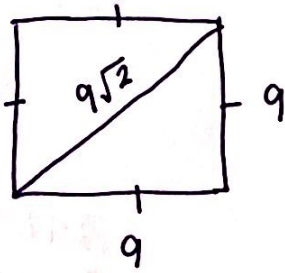
$$\text{Diagonal} = 12\sqrt{2}$$

8. The bases on a softball field form a square, with 60 feet between consecutive bases. You throw a softball from first base to third base. How far do you throw the softball?



you throw $60\sqrt{2}$ ft or 84.9 ft

9. Find the area of a square whose diagonal is $9\sqrt{2}$ m.



Area = 81 m^2