

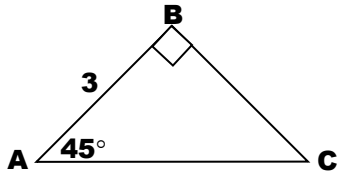
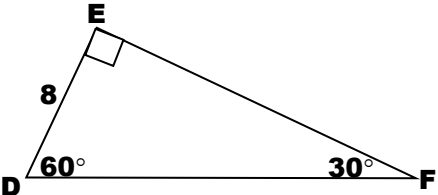
NAME _____ DATE _____ PER. _____

45°-45°-90° & 30°-60°-90° TRIANGLES**Find the indicated length for each of the following.**

_____1.	The length of a diagonal of a square is $10\sqrt{2}$ inches. Find the length of one side of the square.
_____2.	The perimeter of a square is 44 meters. Find the length of a diagonal of a square.
_____3.	The length of one side of a square is 13.5 centimeters. Find the length of a diagonal of the square.
_____4.	The length of the diagonal of a square is 10 inches. Find the length of one side of the square.
_____5.	The length of one side of an equilateral triangle is $6\sqrt{3}$ meters. Find the length of one altitude of the triangle.

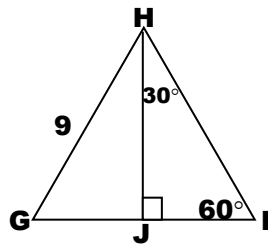
<p>_____6.</p>	<p>The length of an altitude of an equilateral triangle is 12 feet. Find the length of a side of the triangle.</p>
<p>_____7.</p>	<p>The perimeter of an equilateral triangle is 39 centimeters. Find the length of the altitude of the triangle.</p>
<p>_____8.</p>	<p>The length of a diagonal of a square is $18\sqrt{2}$ millimeters. Find the perimeter of the square.</p>

Find the indicated values.

<p>9. BC = _____ AC = _____</p>	 <p>A right-angled triangle with vertices A, B, and C. The right angle is at vertex B. The angle at vertex A is labeled 45°. The side AB is labeled with the number 3. The side BC is the unknown side opposite to angle A. The hypotenuse is AC.</p>
<p>10. EF = _____ DF = _____</p>	 <p>A right-angled triangle with vertices D, E, and F. The right angle is at vertex E. The angle at vertex D is labeled 60° and the angle at vertex F is labeled 30°. The side DE is labeled with the number 8. The side EF is the unknown side opposite to angle D. The hypotenuse is DF.</p>

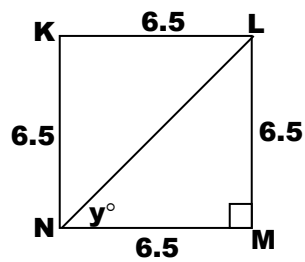
11. $HJ =$ _____

$JI =$ _____



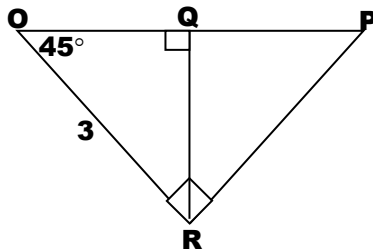
12. $LN =$ _____

$y =$ _____



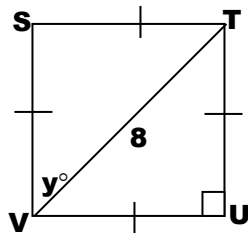
13. $OP =$ _____

$QR =$ _____



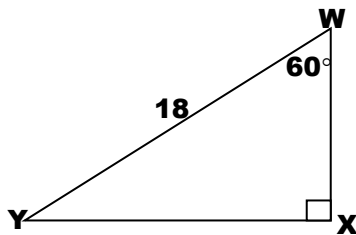
14. $ST =$ _____

$y =$ _____



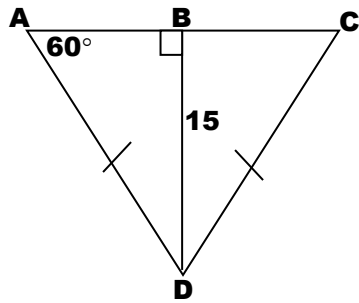
15. $WX =$ _____

$YX =$ _____



16. AC = _____

AD = _____



17. _____

Stacy is cutting a square piece of material for a tablecloth. The table's diagonal is 36 inches. She wants the diagonal of the tablecloth to be an extra 10 inches so it will hang over the edges of the table. What size square should Stacy cut to make the tablecloth? Round to the nearest inch.

18. _____

An ornamental pin is in the shape of an equilateral triangle. The length of each side is 6 cm. Josh will attach the fastener to the back along the altitude. Will the fastener fit if it is 4 cm long?