

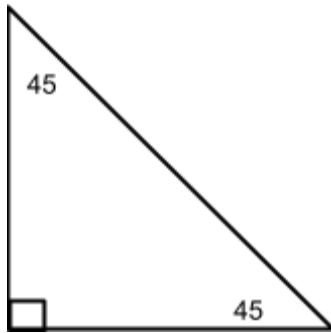
Name _____

7.2 Notes
Special Right Triangles $45^\circ/45^\circ/90^\circ$

An Isosceles Right Triangle has 2 congruent legs, 2 congruent angles (45° each), and one right angle.

45 – 45 – 90 Triangle Theorem

In a $45^\circ - 45^\circ - 90^\circ$ triangle, both legs are congruent and the length of the hypotenuse is $\sqrt{2}$ times the length of the leg.

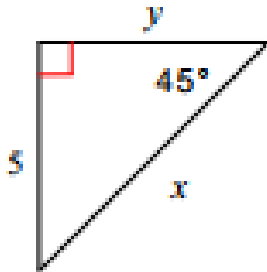


The legs will be the same.

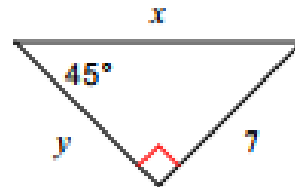
If you know a leg and want to find the hypotenuse, multiply by $\sqrt{2}$.

If you know the hypotenuse and want to find a leg, divide by $\sqrt{2}$.

1.



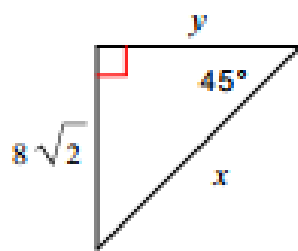
2.



x = _____ y = _____

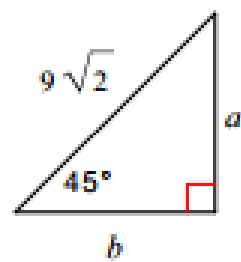
x = _____ y = _____

3.



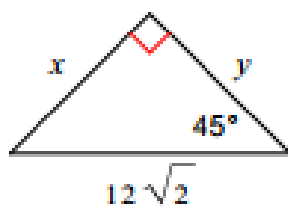
$x =$ _____ $y =$ _____

4.



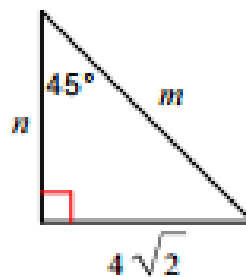
$a =$ _____ $b =$ _____

5.



$x =$ _____ $y =$ _____

6.



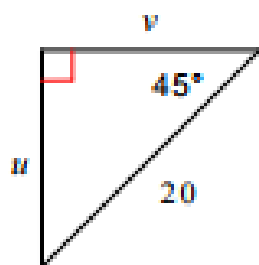
$n =$ _____ $m =$ _____

Dividing Radicals Practice

7. $\frac{5}{\sqrt{3}}$

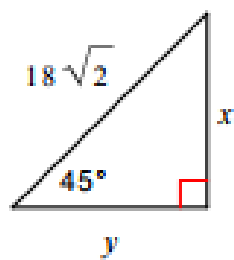
8. $\frac{6\sqrt{2}}{\sqrt{3}}$

9.



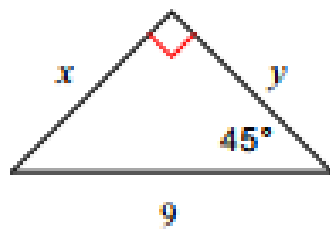
$u =$ _____ $v =$ _____

10.



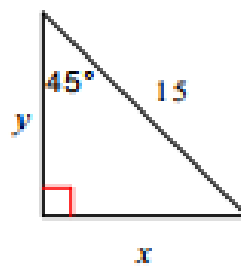
$x =$ _____ $y =$ _____

11.



$x =$ _____ $y =$ _____

12.



$x =$ _____ $y =$ _____