

Name:

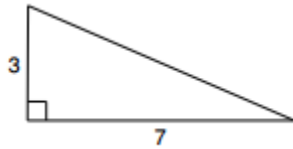
Date:

Period:

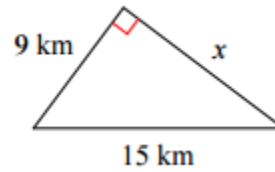
HW #9-7

1. Find the length of the missing side (exact answers). Tell whether the side lengths form a Pythagorean Triple.

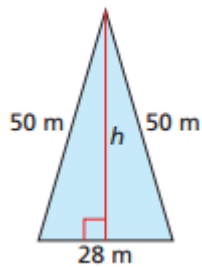
a.



b.



2. Find the **area** of the isosceles triangle.



3. Verify that the segments lengths form a triangle. If so, determine whether the triangle is acute, right, or obtuse.

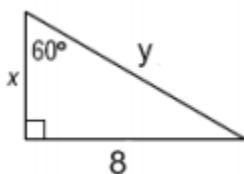
a. 9, 12, 13

b. 8, 12, 15

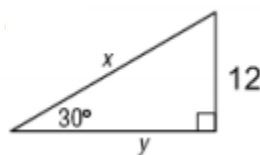
c. $\sqrt{197}$, $2\sqrt{37}$, 7

4. Find the values of x and y (exact answers).

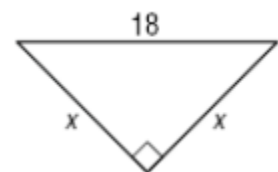
a.



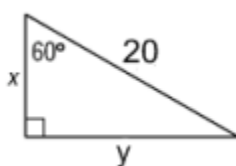
b.



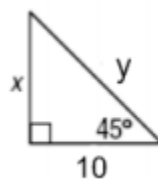
c.



d.

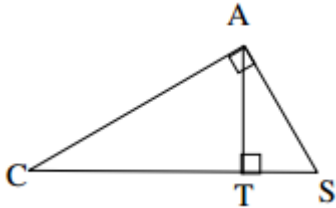


e.

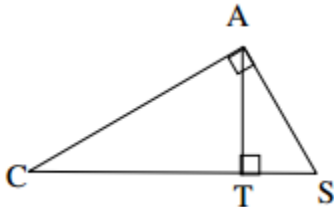


- c. 8 and 18

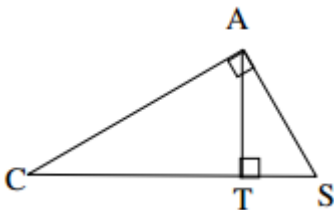
6. Complete the similarity statement: $\triangle ACS \sim \triangle \underline{\hspace{1cm}} \sim \triangle \underline{\hspace{1cm}}$



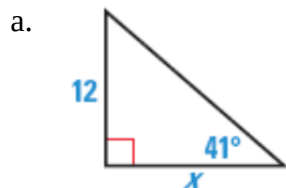
7. In the diagram from #6 (given again below), if $AT = 6$ and $TS = 3$, find TC , AS , and AC .



8. In the diagram from #6 (given again below), if $CT = 10$ and $TS = 8$, find AC , AT , and AS .



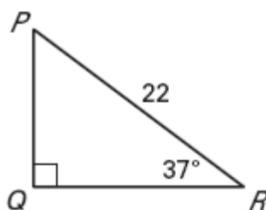
9. Find the value of x in each diagram.



- b. 

10. Find the length of the side of the triangle.

- a. Find PQ.



- b. Find TS.

