

1.) Simplify the following radicals.

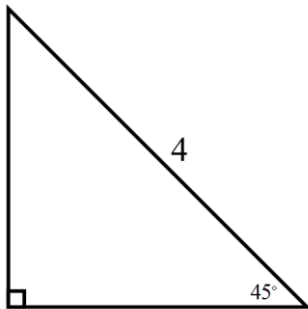
a.) $\sqrt{72}$

b.) $\sqrt{128}$

c.) $\sqrt{280}$

2.) Find the measure of all three angle in an 8-15-17 triple.

3.) Find the missing side lengths of the triangle below. Then, find the perimeter rounded to the nearest tenth.



Perimeter: _____

4.) Find the length of one of diagonals of a rectangle with side lengths of 30 and 72.

5.) Use the right triangles below to find the following:

a.) $m\angle U =$

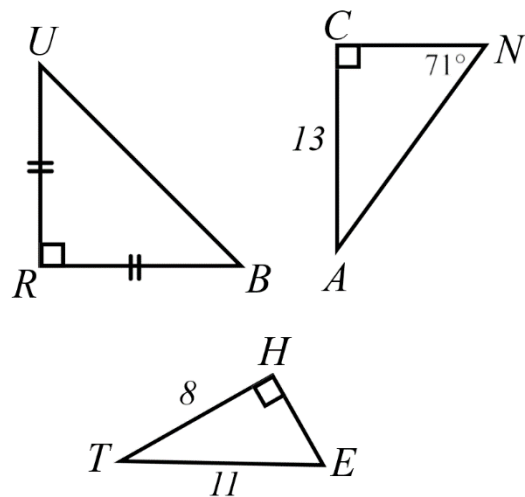
b.) $m\angle A =$

c.) $\sin \angle U =$

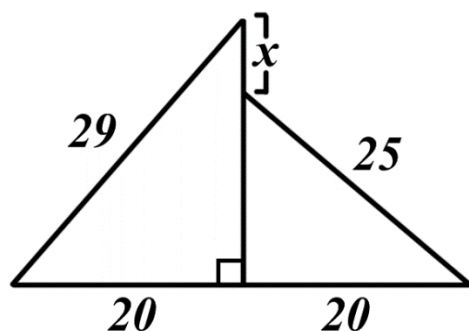
d.) $\tan \angle B =$

e.) $m\angle T =$

f.) $\overline{AN} =$



6.) Find the length of the segment marked by the variable x .



$x = \underline{\hspace{2cm}}$

7.) Challenge: Use the Pythagorean Theorem and factoring to find the side lengths of the right triangle below. **You must show your work (no guess and test!).**

