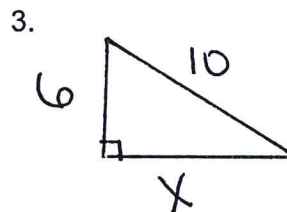
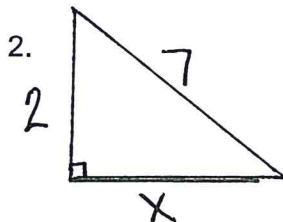
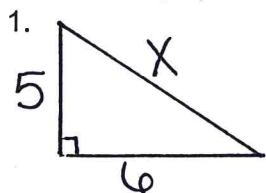


# Ch 9 Review Worksheet

Find x. Simplify completely



4. What is a Pythagorean Triple? Give an example.

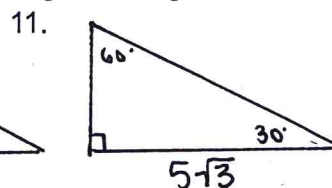
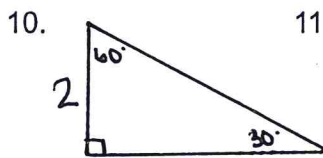
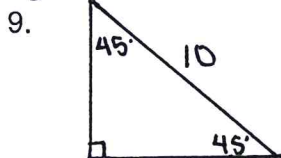
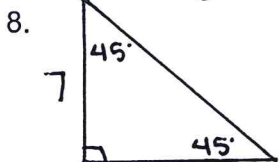
Classify the following side lengths of a triangle as acute, obtuse or right triangles.

5. 4, 10, 12

6.  $3, 2\sqrt{10}, 7$

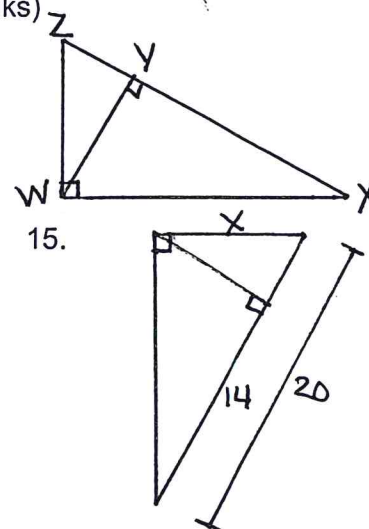
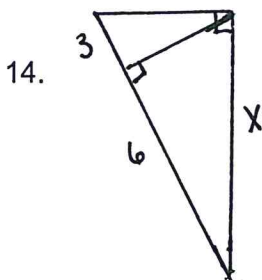
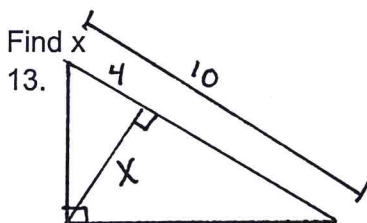
7. 5, 6, 7

Use Special Right Triangle Rules to find the exact value of the missing side lengths.



12. Write a similarity statement that relates the 3 triangles (fill in the blanks)

~ ~



16. Find the geometric mean of the numbers listed

a) 2 & 8

b) 3 & 6

17. Find the trig ratios as a fraction and as a decimal rounded to the nearest hundredth.

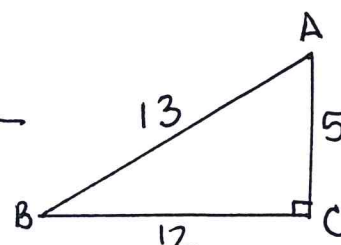
a)  $\tan A = \frac{\text{opposite}}{\text{adjacent}} = \frac{\text{opposite}}{\text{adjacent}}$

b)  $\tan B = \frac{\text{opposite}}{\text{adjacent}} = \frac{\text{opposite}}{\text{adjacent}}$

c)  $\sin B = \frac{\text{opposite}}{\text{hypotenuse}} = \frac{\text{opposite}}{\text{hypotenuse}}$

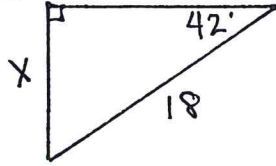
d)  $\cos A = \frac{\text{adjacent}}{\text{hypotenuse}} = \frac{\text{adjacent}}{\text{hypotenuse}}$

e)  $\cos B = \frac{\text{adjacent}}{\text{hypotenuse}} = \frac{\text{adjacent}}{\text{hypotenuse}}$

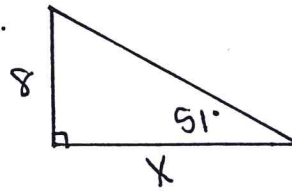


Find the value of  $x$ . Round to the nearest tenth.

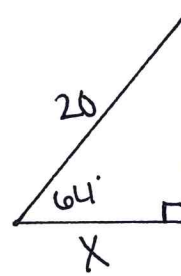
18.



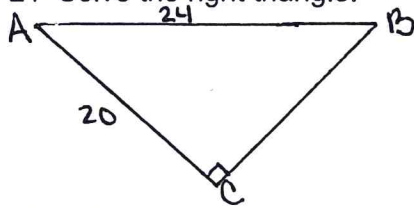
19.



20.



21. Solve the right triangle.



22. A 20ft ladder leans up against the side of a house. It reaches 18ft up the wall. Draw a picture and find the angle of elevation the ladder makes with the ground.

23. You stand 100ft from the base of a tree and the angle of elevation to the top of the tree is  $35^\circ$ . How tall is the tree?