

Test 5 – Lesson 2 homework - Geometric Ratios (Show all solving work)

Name: \_\_\_\_

Fill in the blanks below with the word that best fits the sentence.

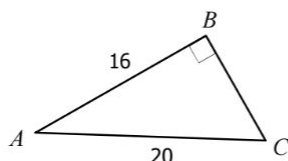
Sine

Cosine

Tangent

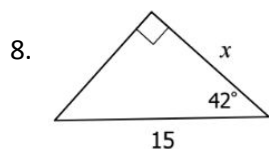
- \_\_\_\_\_ is the ratio of the length of the side opposite the given angle to the length of the hypotenuse of a right-angled triangle.
- In any right triangle, the \_\_\_\_\_ of an angle is the length of the opposite side divided by the length of the adjacent side.
- \_\_\_\_\_ is the ratio of the adjacent side to the hypotenuse of a right-angled triangle.

Use the triangle below. Find the missing side and then find the trig ratios for angle A. Write your answers in simplest form.

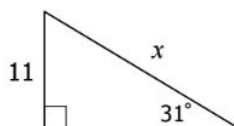


- Side BC = \_\_\_\_\_
- $\sin A =$  \_\_\_\_\_
- $\cos A =$  \_\_\_\_\_
- $\tan A =$  \_\_\_\_\_

Find the value of x for each triangle. Use trig ratios or inverse of trig ratios.

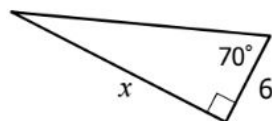


9.

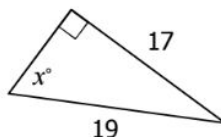


- \_\_\_\_\_
- \_\_\_\_\_

10.



11.



- \_\_\_\_\_
- \_\_\_\_\_

12. Use a calculator to find the measure of the angle to the nearest degree.  $\cos A = 0.3222$

12.. \_\_\_\_\_

13. Solve  $\triangle ABC$  by finding each measure indicated.

<u>Angles</u>	<u>Sides</u>
$A =$ _____	$a = 17$
$B =$ _____	$b =$ _____
$C =$ _____	$c = 19$

