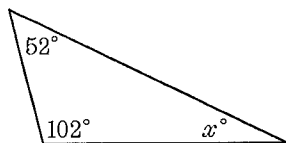


Name \_\_\_\_\_

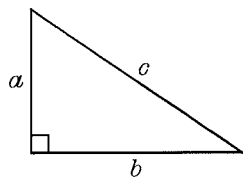
Per/Sec. \_\_\_\_\_

- Find the distance between  $(-5, 6)$  and  $(-9, 6)$ .
- Find the distance between  $(-3, 2)$  and  $(-3, -5)$ .
- Find the distance between  $(3, -5)$  and  $(-1, 2)$ .

- Find the value of  $x$  in the diagram.



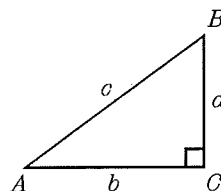
- In a right triangle, the side opposite the right angle is called the \_\_\_\_\_.
- In a right triangle, the sides that form the right angle are called the \_\_\_\_\_.
- In the diagram,  $a = 3$  and  $b = 4$ . Find  $c$ .



- In the diagram,  $a = 7$  and  $b = 24$ . Find  $c$ .

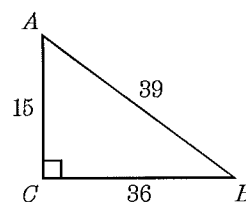
- If a 25-foot ladder is placed against a wall so that it reaches a height of 24 feet, how far away from the base of the wall are the feet of the ladder?
- Two vehicles leave the same town at 8 am. One travels north at 30 mph, the other travels west at 45 mph. To the nearest hundredth of a mile, how far apart are they at 11 am the same day?

- What is the sine ratio of  $\angle A$ ?

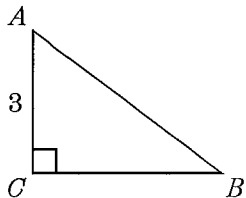


- What is the cosine ratio of  $\angle A$ ?

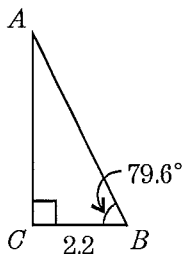
- Given  $\triangle ABC$  shown, express the *sine*, *cosine*, and *tangent* of  $\angle A$  as reduced fractions.



14. If  $\cos \angle A = \frac{3}{5}$ , find  $AB$ .



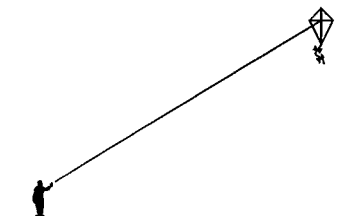
15. Find  $AB$  to the nearest tenth.



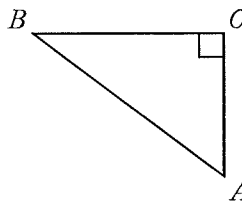
16. Use a calculator to find the values of the following ratios to four decimal places.

- a)  $\sin 10^\circ$
- b)  $\cos 80^\circ$
- c)  $\tan 50^\circ$
- d)  $\sin 65^\circ$
- e)  $\tan 40^\circ$

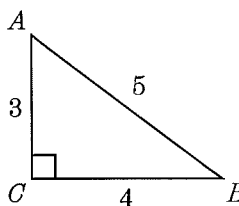
17. When I went kite flying the other day, I managed to let out an entire roll of string (400 feet). If the string, when pulled tight, formed a  $40^\circ$  angle with the ground, about how high was the kite?



18. Solve the right triangle if  $\angle A = 63^\circ$  and  $a = 9.7$  meters. Give lengths to 3 significant figures and angles to the nearest tenth of a degree.



19.  $\sin \angle \text{---} = \frac{4}{5}$



20. One end of a ramp is raised to the back of a truck 1 meter above the ground. If the length of the ramp is 3 meters, what is the approximate measure of the angle the ramp makes with the ground? Round your answer to the nearest tenth of a degree.



18.  $\angle B = 27.0^\circ, b \approx 4.94 \text{ m}, c \approx 10.9 \text{ m}$

19. $A$	0.8391
16.	0.1736; 0.1736; 1.1918; 0.9063;
13.	$\sin A = \frac{12}{13}$ ; $\cos A = \frac{5}{13}$ ; $\tan A = \frac{5}{12}$
10.	162.25 miles
7.	5
4.	26
1.	4
2.	7
3.	$\sqrt{65}$
5.	hypotenuse
6.	legs
8.	25
9.	7 ft
11.	$\frac{c}{a}$
12.	$\frac{c}{b}$
15.	12.2
14.	5
17.	$\approx 257.1 \text{ ft}$
20.	19.5°

Answer List