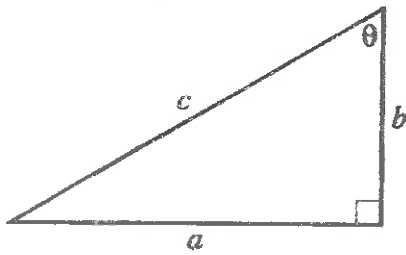


Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

1. The dimensions of the right triangle shown below are given in feet. What is $\sin \theta$?



$$\frac{a}{c}$$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed: Find sin/cos/tan given at least two sides

2. For $\angle D$ in DEF below, which of the following trigonometric expressions has a value of $4/5$?

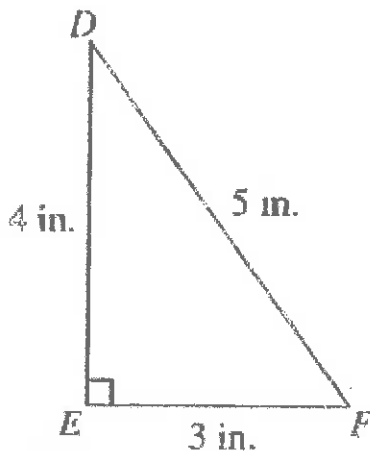
a. $\sin D$

b. $\tan D$

c. $\cos D$

d. $\sec D$

e. $\csc D$



Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

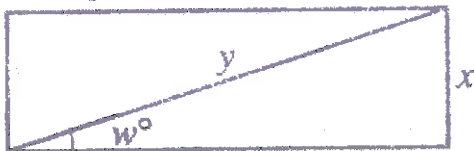
Skills Needed: Find sin/cos/tan given at least two sides

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

3. Which of the following trigonometric equations is valid for the side measurement x inches, diagonal measurement y inches, and angle measurement w° in the rectangle shown below?



a. $\cos w^\circ = \frac{x}{y}$

b. $\cot w^\circ = \frac{x}{y}$

c. $\sec w^\circ = \frac{x}{y}$

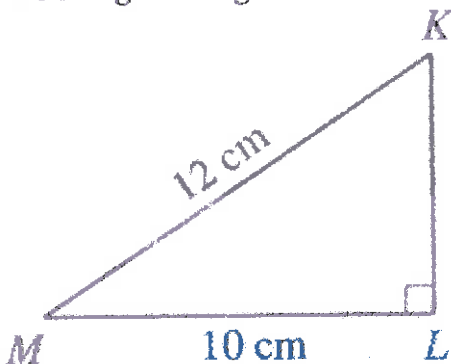
d. $\sin w^\circ = \frac{x}{y}$

e. $\tan w^\circ = \frac{x}{y}$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed: Find sin/cos/tan given at least two sides

4. For right triangle $\triangle KLM$ below, what is $\sin \angle M$?



$\frac{\sqrt{11}}{6}$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

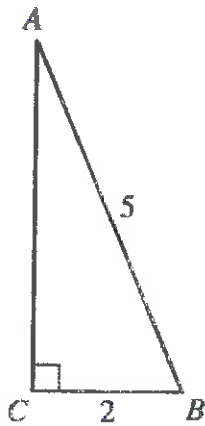
Skills Needed: Use Pythagorean theorem
Find sin/cos/tan

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

5. In the right triangle below, the measure of $\angle C$ is 90° , $AB=5$ units, and $CB=2$ units. What is $\tan B$? (Keep the answer in fraction form).

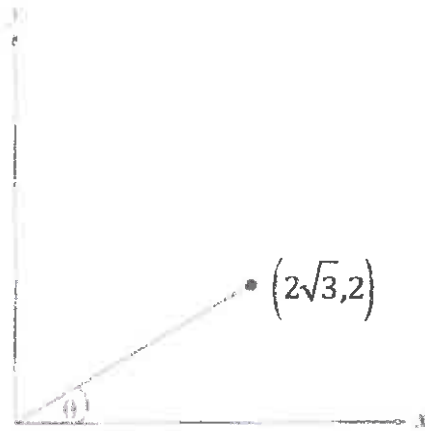


$$\frac{\sqrt{21}}{2}$$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed: Find sin/cos/tan
use pythagorean theorem

6. In the figure given below, what is $\sin \theta$?



$$\frac{1}{2}$$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

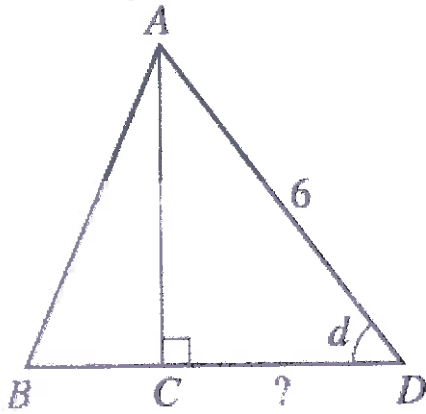
Skills Needed: Use pythagorean Theorem
Find sin/cos/tan

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

7. In $\triangle ABD$, shown below, C is on BD , the length of AD is 6 inches, and $\sin d = 0.8$. How many inches long is CD ?



3.6

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed:

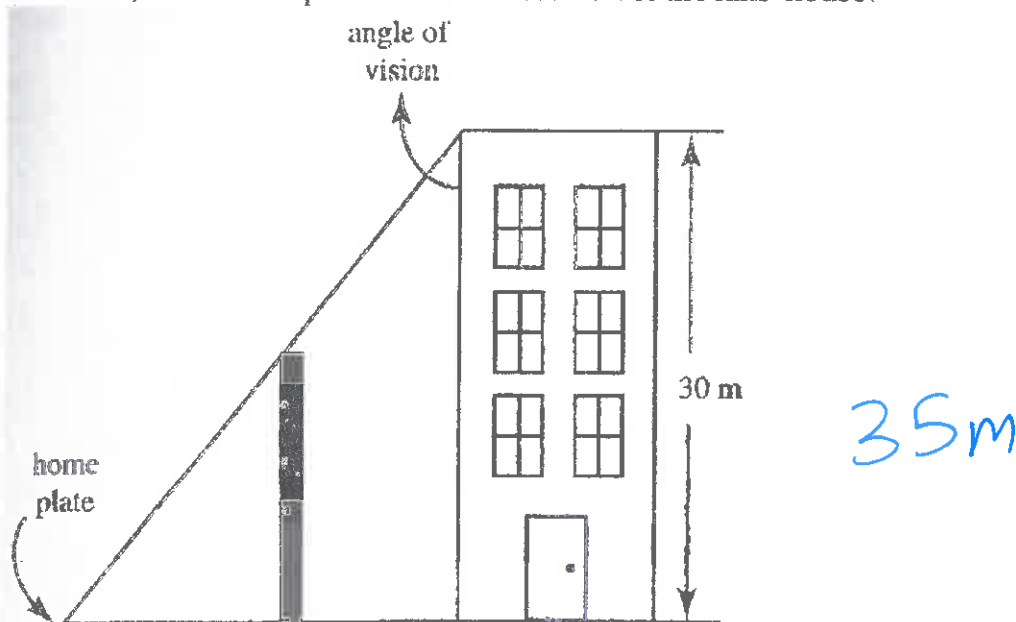
Use Pythagorean Theorem

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

8. A group of die-hard baseball fans has purchased a house that gives them a direct view of home plate, although their view of the rest of the field is largely impeded by the outfield wall. The house is 30 meters tall, and their angle of vision from the top of the building to home plate has a tangent of $\frac{7}{6}$. What is the horizontal distance, in meters, from home plate to the closest wall of the fans' house?



Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed:

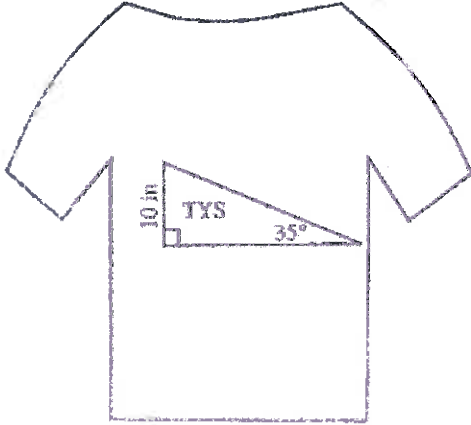
Find missing side

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

9. A rock band, The Young Sohcahtoans, is trying to design a T-shirt logo. The measurements they have chosen are represented on the figure below. The angle to the right of the logo "TYS" has a degree measure of 35° , and the side of the figure has a measure of 10 in. Which of the following expressions gives the measure, in inches, of the diagonal top side of the figure?



- a. $10 \tan 35^\circ$
- b. $10 \cos 35^\circ$
- c. $10 \sin 35^\circ$

d. $\frac{10}{\sin 35^\circ}$

e. $\frac{10}{\cos 35^\circ}$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed:

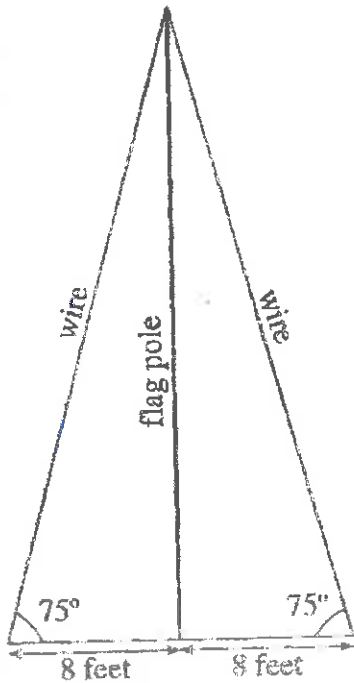
Find missing side

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

10. Two wires connect the top of a flagpole to the ground, as shown below. Each wire makes a 75° angle with the ground at a point 8 feet from the flagpole. Which of the following expressions gives the height, in feet, of the flagpole?



a. $8 \cos 75^\circ$

b. $8 \sin 75^\circ$

c. $8 \tan 75^\circ$

d. $\frac{8}{\cos 75^\circ}$

e. $\frac{8}{\sin 75^\circ}$

Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed:

Find missing side

Name: _____

Per: _____ Date: _____

Sin/Cos/Tan Study Guide

11. The cross-sectional view of a tent is shown below. If the tent is 6 feet wide at its base, then which of the following expressions could be used to calculate the height of the tent, in feet?

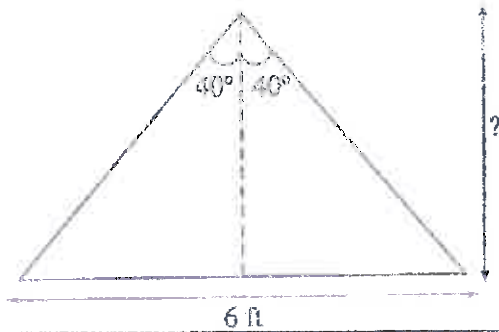
a. $\frac{3}{\tan 80^\circ}$

b. $3 \tan 40^\circ$

c. $\frac{3}{\tan 40^\circ}$

d. $6 \tan 40^\circ$

e. $3 \tan 80^\circ$



Know	Need to Know	My answer should be:	My answer should represent (circle one):
		Number	side
		Word	angle
		Phrase	a ratio-sine, cosine, tangent

Skills Needed:

Find missing side

Skills Bank
