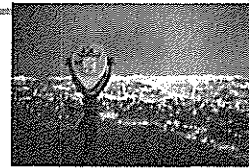


Name: Similarity & Right Triangle Trigonometry 6.10

Ready, Set, Go!



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Ready

Topic: Modeling contexts with visuals

For each story presented below *sketch a picture of the situation and label as much of the picture as possible. No need to answer the question or find the missing values, simply represent the situation with a sketch.*

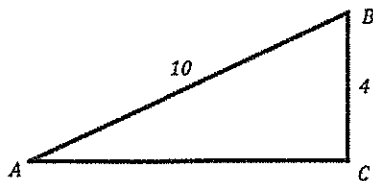
- Jill put a ladder up against the house to try and reach a light that is out and needs to be changed. She knows the ladder is 10 feet long and the distance from the base of the house to the bottom of the ladder is 4 feet.
- Francis is a pilot of an airplane that if flying at an altitude of 3,000 feet when the plane begins its decent toward the ground. If the angle of decent of the plane is 15° how much farther will the plane fly before it is on the ground?
- Abby is standing at the top of a very tall skyscraper and looking through a telescope at the scenery all around her. The angle of decline on the telescope says 35° and Abby knows she is 30 floors up and each floor is 15 feet tall. How far from the base of the building is the object that Abby is looking at?

Set

Topic: Solving triangles using Trigonometric Ratios

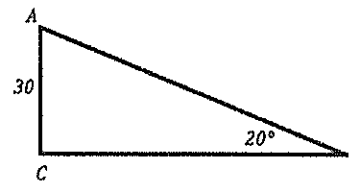
In each triangle find the missing angles and sides. In all questions $m\angle C = 90^\circ$

4.



- a. $m\angle A =$ b. $m\angle B =$ c. $AC =$

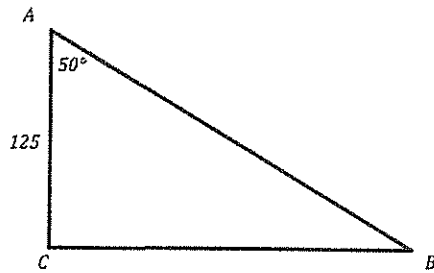
5.



- a. $m\angle A =$ b. $AB =$ c. $BC =$

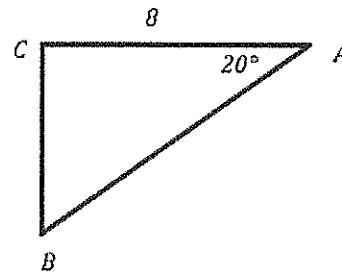
Similarity & Right Triangle Trigonometry | 6.10

6.



- a. $m\angle B =$ b. $AB =$ c. $BC =$

7.



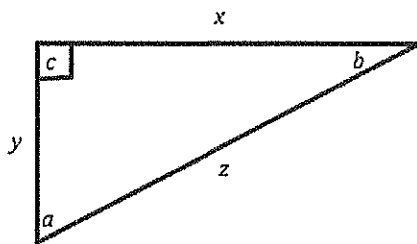
- a. $m\angle B =$ b. $AB =$ c. $BC =$

Go

Topic: Trigonometric Ratios

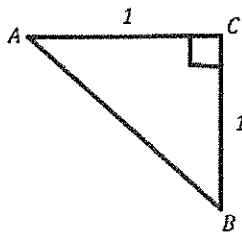
Use the given right triangle to identify the trigonometric ratios. And angles were possible.

8.



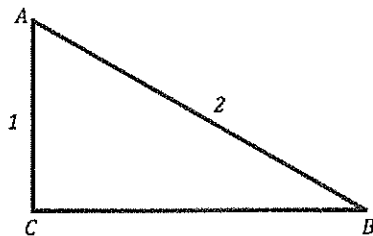
- a. $\sin(a) =$ b. $\cos(a) =$ c. $\tan(a) =$
d. $\sin(b) =$ e. $\cos(b) =$ f. $\tan(b) =$

9.



- a. $\sin(A) =$ b. $\cos(A) =$ c. $\tan(A) =$
d. $\sin(B) =$ e. $\cos(B) =$ f. $\tan(B) =$
g. $m\angle A =$ h. $m\angle B =$

10.



- a. $\sin(A) =$ b. $\cos(A) =$ c. $\tan(A) =$
d. $\sin(B) =$ e. $\cos(B) =$ f. $\tan(B) =$
g. $m\angle A =$ h. $m\angle B =$ $m\angle C = 90^\circ$

