

TRIGONOMETRY 4

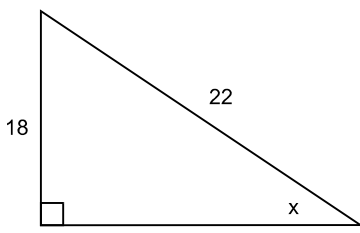
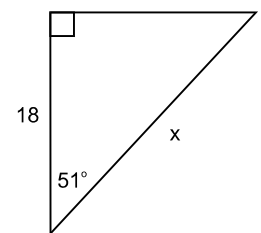
1. Find the following. Round answers to 4 decimal places.

- a. $\cos 82^\circ$ _____
- b. $\tan 5.6^\circ$ _____
- c. $\sin 0.77^\circ$ _____

2. Find $\angle A$ (in degrees) for each of the following. Round to one decimal place.

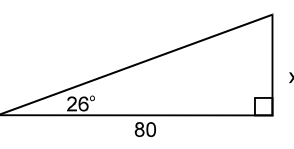
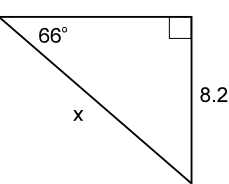
- a. $\sin \angle A = 0.9321$ _____
- b. $\tan \angle A = 2.563$ _____
- c. $\cos \angle A = 0.089$ _____

3. Find $\angle x$ or side x in each of the following. Round answers to one decimal place.

a.  b. 

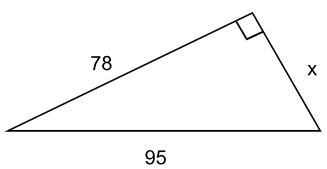
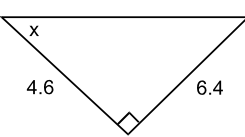
a. _____

b. _____

c.  d. 

c. _____

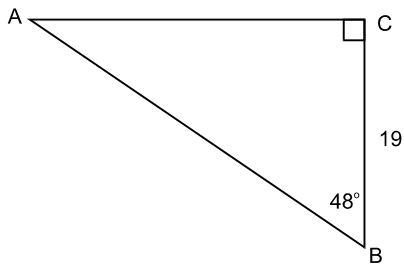
d. _____

e.  f. 

e. _____

f. _____

4. Solve $\triangle ABC$. Round your answers to one decimal place.



$$\overline{AC} = \underline{\hspace{2cm}}$$

$$\overline{AB} = \underline{\hspace{2cm}}$$

$$\angle A = \underline{\hspace{2cm}}$$

5. Vicki estimates the distance from a large rock to the base of a vertical cliff to be 43 m. Standing by the large rock, the angle between the ground and her line of sight to the top of the cliff is about 57° . Estimate the height of the cliff.

$$\text{Height of the cliff} = \underline{\hspace{2cm}}$$

6. What angle does a 7.5 m ladder make with a wall if the top of the ladder is 6 m above the ground?

$$\text{Angle of the ladder} = \underline{\hspace{2cm}}$$

ANSWER KEY

1. a. 0.1392 b. 0.0981 c. 0.0134

2. a. 68.8° b. 68.7° c. 84.9°

3. a. 54.9° b. 28.6 c. 39.0 d. 9.0 e. 54.2
f. 54.3°

4. a. 21.1 b. 28.4 c. 42°

5. 66.2 m

6. 36.9°

Source: Government of BC used with permission.