## Sine, Cosine and Tangent

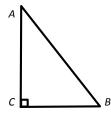
Used to find a missing side of a right triangle when one side and one acute angle are given. Used to find a missing acute angle when two sides are given.

## **Trigonometry Definitions**

$$\sin \angle = \frac{opposite}{hypotenuse}$$

$$\cos \measuredangle = \frac{adjacent}{hypotenuse}$$

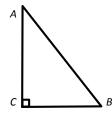
$$\tan \measuredangle = \frac{opposite}{adjacent}$$





$$\cos A =$$

$$\tan A =$$



$$\sin B =$$

$$\cos B =$$

$$\tan B =$$

- 1. Approximate each value. Round your answer to four decimal places.
  - a)  $\tan 24^{\circ}$
  - b)  $\sin 16^{\circ}$
  - c) cos 31°
  - d)  $\tan 45^{\circ}$
  - e)  $\cos 60^{\circ}$
  - f) sin 36°

2. Approximate each angle. Round your answer to the nearest degree.

a) 
$$\cos x = .5299$$

b) 
$$\sin x = .5$$

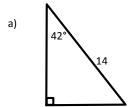
c) 
$$\tan x = .5781$$

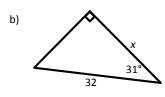
d) 
$$\sin x = .7071$$

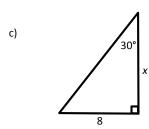
e) 
$$\tan x = .0175$$

f) 
$$\cos x = .8660$$

3. Find the value of *x* and round your answer to the nearest tenth.

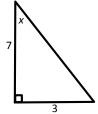




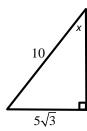


4. Find the value of x. Round your answer to the nearest degree.





b)



c

