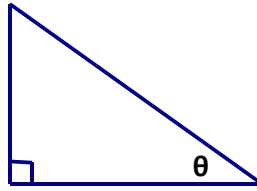


1. Given the following trigonometric values, label the triangle's sides and fill in the blanks.

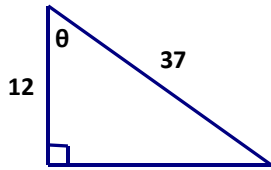
$$\sin \theta = \frac{40}{41} \quad \tan \theta = \frac{40}{9}$$

$$\cos \theta = \underline{\hspace{2cm}}$$



$$\sin(90 - \theta) = \underline{\hspace{2cm}} \quad \cos(90 - \theta) = \underline{\hspace{2cm}} \quad \tan(90 - \theta) = \underline{\hspace{2cm}}$$

2. Given the triangle below, find the length missing side. Then answer the questions about the triangle.



$$\text{Missing side length} = \underline{\hspace{2cm}}$$

$$\sin \theta = \underline{\hspace{2cm}}$$

$$\cos(90 - \theta) = \underline{\hspace{2cm}}$$

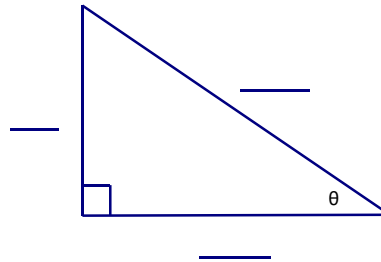
$$\cos \theta = \underline{\hspace{2cm}}$$

$$\frac{\sin \theta}{\cos \theta} = \underline{\hspace{2cm}} \quad \tan(90 - \theta) = \underline{\hspace{2cm}}$$

3. Given the  $\sin \theta = \frac{3}{5}$ , label the picture.

$$\text{Missing side length} = \underline{\hspace{2cm}}$$

$$\cos \theta = \underline{\hspace{2cm}} \quad \sin(90 - \theta) = \underline{\hspace{2cm}}$$



4. Given  $\tan \theta = \frac{7}{24}$ , draw a right triangle and find  $\sin \theta$  &  $\cos \theta$ .

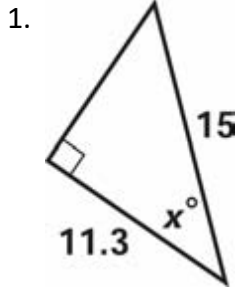
$$5. \text{ Given } \sin \theta = \frac{8}{17} \quad \cos \theta = \underline{\hspace{2cm}} \quad \tan \theta = \underline{\hspace{2cm}}$$

$$\sin(90 - \theta) = \underline{\hspace{2cm}} \quad \cos(90 - \theta) = \underline{\hspace{2cm}}$$

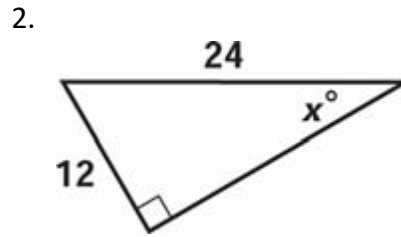
$$\tan(90 - \theta) = \underline{\hspace{2cm}}$$

# Inverse Trigonometry

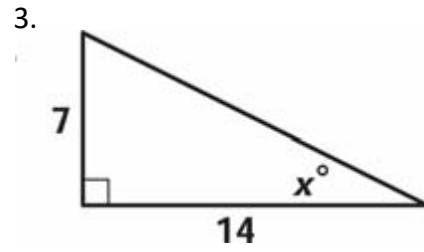
Find measure of the indicated angle. Round to the 3<sup>rd</sup> decimal place.



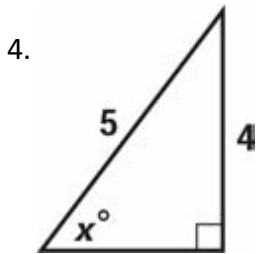
x = \_\_\_\_\_



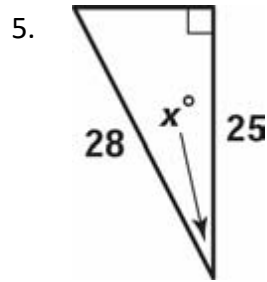
x = \_\_\_\_\_



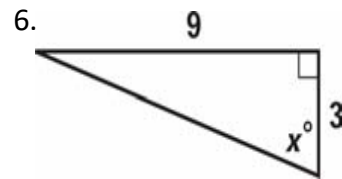
x = \_\_\_\_\_



x = \_\_\_\_\_



x = \_\_\_\_\_



x = \_\_\_\_\_

