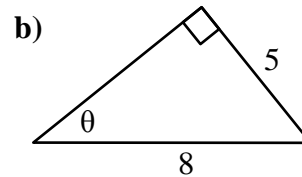
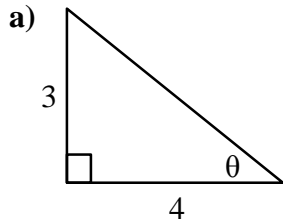


**Trigonometric Functions of Acute Angles***Review of Prior Concepts***1. Convert each radian measure to degrees:**

a)  $\frac{\pi}{6}$

b)  $\frac{\pi}{4}$

c)  $\frac{\pi}{3}$

**2. Find the values of  $\sin \theta$ ,  $\cos \theta$ ,  $\tan \theta$ .****Six Trigonometric Ratios**

$\sin \theta = \text{---}$

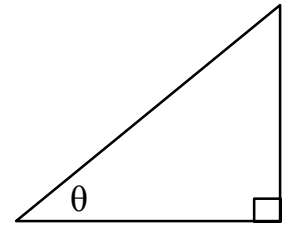
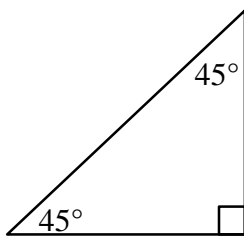
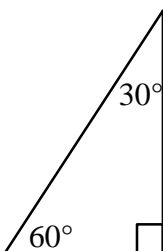
$\csc \theta = \text{---}$

$\cos \theta = \text{---}$

$\sec \theta = \text{---}$

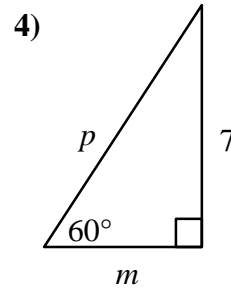
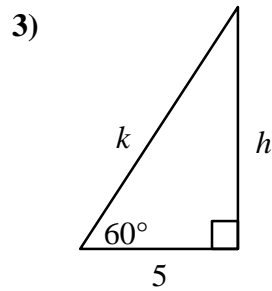
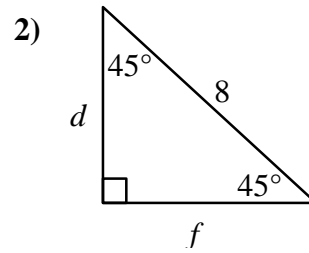
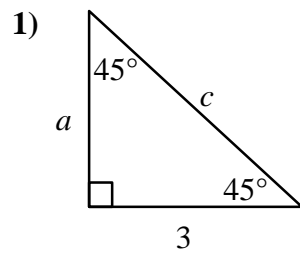
$\tan \theta = \text{---}$

$\cot \theta = \text{---}$

**Special Right Triangles** $45^\circ\text{--}45^\circ\text{--}90^\circ \Delta$ What do you know about a  $45^\circ\text{--}45^\circ\text{--}90^\circ \Delta$ ? $30^\circ\text{--}60^\circ\text{--}90^\circ \Delta$ What do you know about a  $30^\circ\text{--}60^\circ\text{--}90^\circ \Delta$ ?

Examples:

Find the value of the variables.



Evaluate without using a calculator:

5)  $\tan\left(\frac{\pi}{3}\right)$

6)  $\csc\left(\frac{\pi}{4}\right)$

Find the acute angle  $\theta$ , in both degrees and radians, without using a calculator.

7)  $\tan \theta = \sqrt{3}$

8)  $\cos \theta = \frac{\sqrt{3}}{2}$

Find the value of  $x$  in the triangle.

