

Name Schlansky  $\sin \theta = \frac{O}{H}$   $\cos \theta = \frac{A}{H}$   $\tan \theta = \frac{O}{A}$   
 Mr. Schlansky

Date \_\_\_\_\_  
 Geometry

## Basic Trigonometric Ratios

1. Find the following trigonometric ratios for the given triangle:

a)  $\sin B$

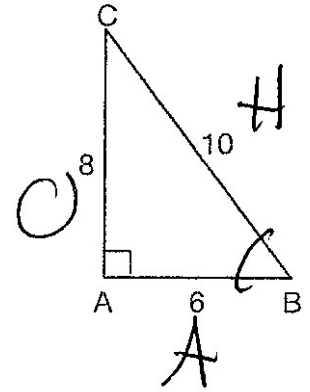
$$\frac{O}{H} = \frac{8}{10}$$

b)  $\cos B$

$$\frac{A}{H} = \frac{6}{10}$$

c)  $\tan B$

$$\frac{O}{A} = \frac{8}{6}$$



d)  $\csc B$

$$\frac{H}{O} = \frac{10}{8}$$

e)  $\sec B$

$$\frac{H}{A} = \frac{10}{6}$$

f)  $\cot B$

$$\frac{A}{O} = \frac{6}{8}$$

2. Find the following trigonometric ratios for the given triangle:

a)  $\sin A$

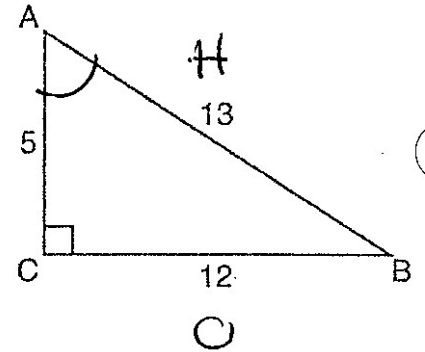
$$\frac{O}{H} = \frac{12}{13}$$

b)  $\cos A$

$$\frac{A}{H} = \frac{5}{13}$$

c)  $\tan A$

$$\frac{O}{A} = \frac{12}{5}$$



d)  $\csc A$

$$\frac{H}{O} = \frac{13}{12}$$

e)  $\sec A$

$$\frac{H}{A} = \frac{13}{5}$$

f)  $\cot A$

$$\frac{A}{O} = \frac{5}{12}$$

3. Find the following trigonometric ratios for the given triangle:

a)  $\sin U$

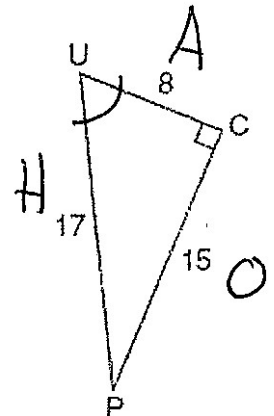
$$\frac{O}{H} = \frac{15}{17}$$

b)  $\cos U$

$$\frac{A}{H} = \frac{8}{17}$$

c)  $\tan U$

$$\frac{O}{A} = \frac{15}{8}$$



d)  $\csc U$

$$\frac{H}{O} = \frac{17}{15}$$

e)  $\sec U$

$$\frac{H}{A} = \frac{17}{8}$$

f)  $\cot U$

$$\frac{A}{O} = \frac{8}{15}$$