

Name: \_\_\_\_\_

## Using Fundamental Identities

**Exercise 1:** Find the values of  $\cos$ ,  $\tan$ ,  $\cot$ ,  $\csc$  and  $\sec$ .

1)  $\sin \theta = \frac{1}{2}$

2)  $\sin \theta = \frac{1}{\sqrt{2}}$

3)  $\sin \theta = \frac{5}{13}$

**Exercise 2:** Use the given to evaluate (if possible) all the six trigonometric functions

1)  $\sin \theta = \frac{\sqrt{3}}{2}$  ,  $\cos \theta = -\frac{1}{2}$

2)  $\tan \theta = \frac{\sqrt{3}}{3}$  ,  $\cos \theta = -\frac{\sqrt{3}}{2}$

3)  $\sec \theta = \sqrt{2}$  ,  $\sin \theta = -\frac{\sqrt{2}}{2}$

4)  $\tan \theta = \frac{5}{12}$  ,  $\sec \theta = -\frac{13}{12}$

5)  $\cos\left(\frac{\pi}{2} - \theta\right) = \frac{3}{5}$  ,  $\cos \theta = \frac{4}{5}$

6)  $\sin(-\theta) = -\frac{1}{3}$  ,  $\tan \theta = -\frac{\sqrt{2}}{4}$

7)  $\sec \theta = 4$  ,  $\sin \theta > 0$

8)  $\sin \theta = -1$  ,  $\cot \theta = 0$

9)  $\tan \theta$  is undefined,  $\sin \theta > 0$