

Name : _____

Answer key

Pythagorean Identities

L1S1

- 1) If $\cos x = -\frac{8}{17}$ and $\pi \leq x \leq \frac{3\pi}{2}$, find $\sin x$.

$$\sin x = -\frac{15}{17}$$

- 2) If $\sec x = \frac{13}{12}$ and $270^\circ \leq x \leq 360^\circ$, find $\cot x$.

$$\cot x = -\frac{12}{5}$$

- 3) If $\csc x = \frac{\sqrt{6}}{2}$ and x lies in quadrant I, find $\cos x$.

$$\cos x = \frac{\sqrt{3}}{3}$$

- 4) If $\tan x = -\frac{3}{4}$ and $90^\circ \leq x \leq 180^\circ$, find $\csc x$.

$$\csc x = \frac{5}{3}$$