

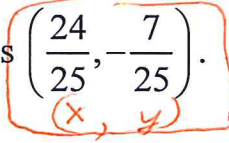
Review 4.2

Precalculus w/ Trig

Name KEY
 Period _____

Unit Circle, period, Def of Trig Functions, Even/Odd

1. Determine the exact values of the six trig functions of the angle θ , given the point on the unit circle is $\left(\frac{24}{25}, -\frac{7}{25}\right)$.



- a) $\sin \theta = \underline{-\frac{7}{25}}$ b) $\cos \theta = \underline{\frac{24}{25}}$ c) $\tan \theta = \underline{-\frac{7}{24}}$
 d) $\csc \theta = \underline{-\frac{25}{7}}$ e) $\sec \theta = \underline{\frac{25}{24}}$ f) $\cot \theta = \underline{-\frac{24}{7}}$

2. Evaluate the six trig functions of the real number $t = \frac{11\pi}{6}$



- a) $\sin t = \underline{-\frac{1}{2}}$ b) $\cos t = \underline{\frac{\sqrt{3}}{2}}$ c) $\tan t = \underline{-\frac{1}{\sqrt{3}} = -\frac{\sqrt{3}}{3}}$
 d) $\csc t = \underline{-2}$ e) $\sec t = \underline{\frac{2\sqrt{3}}{3}}$ f) $\cot t = \underline{-\sqrt{3}}$

3. Evaluate the six trig functions of the real number $t = \pi$



- a) $\sin t = \underline{0}$ b) $\cos t = \underline{-1}$ c) $\tan t = \underline{0}$
 d) $\csc t = \underline{\text{undefined}}$ e) $\sec t = \underline{-1}$ f) $\cot t = \underline{\text{undefined}}$

4. If $\sin t = \frac{4}{5}$, find

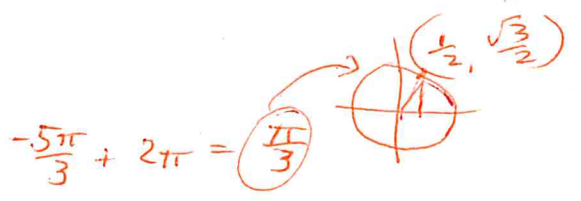
- a) $\sin(-t) = \underline{-\frac{4}{5}}$ b) $\csc(-t) = \underline{-\frac{5}{4}}$

5. If $\cos t = \frac{12}{13}$, find

- a) $\cos(-t) = \underline{\frac{12}{13}}$ b) $\sec(-t) = \underline{\frac{13}{12}}$

6. If $\cos t = -\frac{8}{17}$, find $\cos(\pi + t) = \underline{\frac{8}{17}}$

7. Evaluate $\cos\left(-\frac{5\pi}{3}\right) = \underline{\frac{1}{2}}$



8. Find the point (x, y) on the unit circle that corresponds to $\frac{2\pi}{3}$ $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$