Honors Precalculus Name_____

# Evaluating Trig Functions not on the Unit Circle

Date_____

**Use a calculator to find each. Round your answers to the nearest ten-thousandth.**

1) $\cot \frac{91\pi}{18}$

2) $\sin -\frac{737\pi}{180}$

3) $\sin \frac{59\pi}{10}$

4) $\sec -\frac{49\pi}{36}$

5) $\csc \frac{133\pi}{45}$

6) $\cos -\frac{547\pi}{180}$

7) $\tan \frac{247\pi}{90}$

8) $\sec \frac{35\pi}{6}$

9) $\tan -\frac{979\pi}{180}$

10) $\csc -\frac{209\pi}{36}$

11) $\cos \frac{341\pi}{180}$

12) $\cot -\frac{163\pi}{180}$

**Find $\theta$ so that $\theta \geq 0°$ and $\theta \leq 360°$**

13) $\cos \theta = 0.8746$

14) $\tan \theta = -2.4751$

15) $\sin \theta = 0.9781$

16) $\sin \theta = -0.2756$

17) $\tan \theta = 0.6745$

18) $\cos \theta = -0.9962$

19) $\sec \theta = -14.3356$

20) $\cot \theta = 0.6745$

21) $\csc \theta = -1.0403$

22) $\cot \theta = -3.7321$

23) $\csc \theta = 1.3673$

24) $\sec \theta = 1.1223$

**Find $\theta$ so that $\theta \geq 0°$ and $\theta \leq 360°$. Round your answer to the nearest tenth of one degree.**

25) $\tan \theta = 1.1213$ and $\sin \theta$ is positive.

26) $\sin \theta = 0.5151$ and $\cos \theta$ is negative.

27) $\cot \theta = 0.6878$ and $\theta$ is in Q3.

28) $\csc \theta = 2.5151$ and $\theta$ is in Q1.

29) $\sin \theta = -0.5267$; $\theta \geq 270°$ and $\theta \leq 360°$.