

Review for Unit Circle Test

Date _____ Period _____

Find the exact value of each trigonometric function.

1) $\cos \frac{\pi}{3}$

2) $\cos -\frac{11\pi}{6}$

3) $\sec -\frac{3\pi}{4}$

4) $\tan -\frac{4\pi}{3}$

5) $\tan -\frac{2\pi}{3}$

6) $\sec \frac{5\pi}{2}$

7) $\csc -\frac{13\pi}{4}$

8) $\cos -\frac{25\pi}{6}$

9) $\cot -\frac{17\pi}{4}$

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

11) $\tan -\frac{19\pi}{4}$

12) $\cot \frac{29\pi}{6}$

13) $\csc \frac{16\pi}{3}$

14) $\tan -\frac{11\pi}{2}$

Solve each equation for $0 \leq \theta < 2\pi$.

15) $4 - \sec \theta = 5$

16) $1 = 2 - 2\cos \theta$

17) $4 + \frac{1}{2} \cdot \cot \theta = \frac{7}{2}$

18) $1 + \frac{2}{3} \cdot \csc \theta = \frac{4}{3}$

$$19) 5 + 2\cos \theta = 7$$

$$20) -3 - \tan \theta = \frac{-9 - \sqrt{3}}{3}$$

$$21) 5 = 5 + 3\sin \theta$$

$$22) -4 + \frac{2}{3} \cdot \sin \theta = -\frac{11}{3}$$

$$23) \frac{-8 + \sqrt{3}}{2} = -4 + \cos \theta$$

$$24) -\frac{17}{5} = -3 + \frac{1}{5} \cdot \cos \theta$$

$$25) -\frac{5}{2} = -3 + \sin \theta$$

$$26) \frac{-20 + \sqrt{2}}{5} = -4 - \frac{1}{5} \cdot \sec \theta$$

$$27) -5 + \frac{1}{3} \cdot \tan \theta = \frac{-15 - \sqrt{3}}{3}$$

$$28) -5 + \frac{1}{4} \cdot \csc \theta = -\frac{19}{4}$$

Find the value of the trig function indicated.

29) Find $\cos \theta$ if $\cot \theta = -\frac{\sqrt{2}}{4}$ and $\csc \theta < 0$

30) Find $\sin \theta$ if $\tan \theta = \frac{\sqrt{7}}{3}$ and $\sec \theta > 0$

31) Find $\cot \theta$ if $\sin \theta = -\frac{9}{10}$ and $\cos \theta > 0$

32) Find $\csc \theta$ if $\cos \theta = \frac{2}{3}$ and $\cot \theta < 0$

33) Find $\cos \theta$ if $\sin \theta = -\frac{3}{5}$ and $\cot \theta > 0$

34) Find $\sec \theta$ if $\sin \theta = \frac{3}{5}$ and $\tan \theta < 0$

35) Find $\cot \theta$ if $\cos \theta = \frac{15}{17}$ and $\csc \theta < 0$

36) Find $\csc \theta$ if $\tan \theta = \frac{7}{3}$ and $\sin \theta < 0$