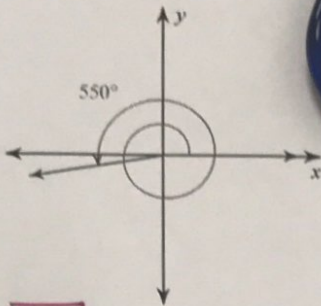


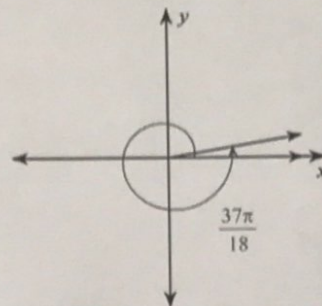
Find the reference angle.

1)



$$10^\circ$$

2)



$$\frac{\pi}{18}$$

3) $\frac{47\pi}{12}$

$$\frac{\pi}{12}$$

4) -675°

$$45^\circ$$

Find the value of the trig function indicated.

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

$$-\frac{4}{5}$$

6) Find $\cot \theta$ if $\csc \theta = \frac{3\sqrt{2}}{4}$ and $\cos > 0$

$$\frac{\sqrt{2}}{4}$$

7) Find $\cos \theta$ if $\sec \theta = \frac{\sqrt{13}}{3}$

$$\frac{3\sqrt{13}}{13}$$



8) Find $\sec \theta$ if $\csc \theta = -\frac{4}{3}$ and $\tan > 0$

$$-\frac{4\sqrt{7}}{7}$$

In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.

9) Find $\sec A$ if $b = 23$, $c = 17\sqrt{2}$

$$\frac{17\sqrt{2}}{23}$$

10) Find $\tan A$ if $c = 16\sqrt{2}$, $a = 16$

$$1$$

11) Find $\cos A$ if $a = 9$, $c = 15$

$$\frac{4}{5}$$

12) Find $\cot A$ if $b = 15$, $a = 20$

$$\frac{3}{4}$$

Find the exact value of each trigonometric function.

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

$$\frac{\sqrt{3}}{2}$$

14) $\csc -\frac{7\pi}{2}$

$$1$$

15) $\sin \frac{14\pi}{3}$

$$\frac{\sqrt{3}}{2}$$

16) $\sec \frac{7\pi}{3}$

$$2$$

17) $\cot 3\pi$

Undefined

18) $\tan -\frac{35\pi}{6}$

$$\frac{\sqrt{3}}{3}$$

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

19) $-2\cot \theta = 0$

$$\left\{ \frac{\pi}{2}, \frac{3\pi}{2} \right\}$$

20) $1 + 4\sin \theta = 3$

$$\left\{ \frac{\pi}{6}, \frac{5\pi}{6} \right\}$$

21) $-2 + \frac{1}{2} \cdot \sec \theta = -\frac{3}{2}$

$$\{0\}$$

22) $\frac{8 + \sqrt{3}}{4} = 2 + \frac{3}{4} \cdot \cot \theta$

$$\left\{ \frac{\pi}{3}, \frac{4\pi}{3} \right\}$$

$$23) -\cos \theta = \cos \theta \cot \theta - \sqrt{3} \csc \theta$$

$$\left\{ \frac{\pi}{6}, \frac{\pi}{2}, \frac{7\pi}{6}, \frac{3\pi}{2} \right\}$$

$$24) -\sec^2 \theta = 2 \tan \theta$$

$$\left\{ \frac{3\pi}{4}, \frac{7\pi}{4} \right\}$$

$$25) \sin^2 \theta = -2 + \cos^2 \theta + 3 \sin \theta$$

$$\left\{ \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6} \right\}$$

$$26) \sec^2 \theta = -2 + \sec \theta + 2 \sec^2 \theta$$

$$\left\{ 0, \frac{2\pi}{3}, \frac{4\pi}{3} \right\}$$

$$27) 2 \csc^2 \theta - 4 = -\csc^2 \theta$$

$$\left\{ \frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3} \right\}$$

$$28) -2 \cos \theta = -\cos \theta \csc \theta$$

$$\left\{ \frac{\pi}{6}, \frac{\pi}{2}, \frac{5\pi}{6}, \frac{3\pi}{2} \right\}$$

$$29) -1 = -\cot^2 \theta$$

$$\left\{ \frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4} \right\}$$

$$30) -\sqrt{3} \cos \theta = 3 \sin \theta$$

$$\left\{ \frac{5\pi}{6}, \frac{11\pi}{6} \right\}$$