

## Practice with sin, cos, tan (bits of 6.5 and 7.2)

**Find the exact value of each trigonometric function. (6.5 practice)**

1)  $\sin -\frac{23\pi}{6}$

2)  $\sin -\frac{3\pi}{4}$

3)  $\cos -\frac{14\pi}{3}$

4)  $\tan \frac{11\pi}{6}$

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

6)  $\sin \frac{4\pi}{3}$

7)  $\tan \frac{19\pi}{6}$

8)  $\cos -\frac{3\pi}{4}$

9)  $\sin \frac{15\pi}{4}$

10)  $\cos \frac{11\pi}{6}$

**The given point is a point on a circle centered at the origin. Find the value of the trig function for the angle  $\theta$  whose terminal ray intersects the circle at that point. (7.2 practice)**

11)  $\cos \theta; (-8, \sqrt{17})$

12)  $\tan \theta; (-\sqrt{13}, -6)$

13)  $\sin \theta; (-8, \sqrt{17})$

14)  $\cos \theta; (16, -12)$

15)  $\sin \theta; (-\sqrt{5}, 2)$

16)  $\tan \theta; (9, -12)$

17)  $\cos \theta; (2, 2\sqrt{3})$

18)  $\cos \theta; (-7, \sqrt{15})$

19)  $\tan \theta; (14, -5)$

20)  $\sin \theta; (-2, -\sqrt{5})$

## Answers to Practice with sin, cos, tan (bits of 6.5 and 7.2)

1)  $\frac{1}{2}$

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

9)  $-\frac{\sqrt{2}}{2}$

13)  $\frac{\sqrt{17}}{9}$

17)  $\frac{1}{2}$

2)  $-\frac{\sqrt{2}}{2}$

6)  $-\frac{\sqrt{3}}{2}$

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

14)  $\frac{4}{5}$

18)  $-\frac{7}{8}$

3)  $-\frac{1}{2}$

7)  $\frac{\sqrt{3}}{3}$

11)  $-\frac{8}{9}$

15)  $\frac{2}{3}$

19)  $-\frac{5}{14}$

4)  $-\frac{\sqrt{3}}{3}$

8)  $-\frac{\sqrt{2}}{2}$

12)  $\frac{6\sqrt{13}}{13}$

16)  $-\frac{4}{3}$

20)  $-\frac{\sqrt{5}}{3}$