

Unit Circle Worksheet Answers

1.  $\frac{1}{2}$

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

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

4. 2

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

6.  $\sqrt{3}$

7.  $\frac{\sqrt{2}}{2}$

8.  $\frac{\sqrt{2}}{2}$

9. 1

10.  $\sqrt{2}$

11.  $\sqrt{2}$

12. 1

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

14.  $\frac{1}{2}$

15.  $\sqrt{3}$

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

17. 2

18.  $\frac{\sqrt{3}}{3}$

19.  $\sin 150^\circ = \frac{1}{2}$   
 $\csc 150^\circ = 2$

$\cos 150^\circ = -\frac{\sqrt{3}}{2}$   
 $\sec 150^\circ = -\frac{2\sqrt{3}}{3}$

$\tan 150^\circ = -\frac{\sqrt{3}}{3}$   
 $\cot 150^\circ = -\sqrt{3}$

20.  $\sin 135^\circ = \frac{\sqrt{2}}{2}$   
 $\csc 135^\circ = \sqrt{2}$

$\cos 135^\circ = -\frac{\sqrt{2}}{2}$   
 $\sec 135^\circ = -\sqrt{2}$

$\tan 135^\circ = -1$   
 $\cot 135^\circ = -1$

21.  $\sin 225^\circ = -\frac{\sqrt{2}}{2}$   
 $\csc 225^\circ = -\sqrt{2}$

$\cos 225^\circ = -\frac{\sqrt{2}}{2}$   
 $\sec 225^\circ = -\sqrt{2}$

$\tan 225^\circ = 1$   
 $\cot 225^\circ = 1$

22.  $\sin \frac{7\pi}{6} = -\frac{1}{2}$   
 $\csc \frac{7\pi}{6} = -2$

$\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$   
 $\sec \frac{7\pi}{6} = -\frac{2\sqrt{3}}{3}$

$\tan \frac{7\pi}{6} = \frac{\sqrt{3}}{3}$   
 $\cot \frac{7\pi}{6} = \sqrt{3}$

23.  $\sin 390^\circ = \frac{1}{2}$   
 $\csc 390^\circ = 2$

$\cos 390^\circ = \frac{\sqrt{3}}{2}$   
 $\sec 390^\circ = \frac{2\sqrt{3}}{3}$

$\tan 390^\circ = \frac{\sqrt{3}}{3}$   
 $\cot 390^\circ = \sqrt{3}$