Trigonometry Worksheet 3 - Answers

1. Find the values for sin, cos, and tan of
$$\frac{\pi}{3}$$
.

$$\sin \frac{\pi}{3} = \frac{\sqrt{3}}{2}$$
, $\cos \frac{\pi}{3} = \frac{1}{2}$, $\tan \frac{\pi}{3} = \sqrt{3}$.

2. Find the values for sin, cos, and tan of
$$\frac{\pi}{4}$$
.

$$\sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}, \cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}, \tan \frac{\pi}{4} = 1.$$

3. Find the values for sin, cos, and tan of
$$\frac{\pi}{6}$$
.

$$\sin\frac{\pi}{6} = \frac{1}{2}$$
, $\cos\frac{\pi}{6} = \frac{\sqrt{3}}{2}$, $\tan\frac{\pi}{6} = \frac{\sqrt{3}}{3}$.

4. Find
$$\sin\left(\frac{7\pi}{6}\right)$$
.

 $\frac{1}{2}$.

5. Find
$$\cos\left(\frac{5\pi}{6}\right)$$
.

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

6. Find
$$\cos\left(\frac{2\pi}{3}\right)$$
.

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

7. Find
$$\sin\left(\frac{5\pi}{4}\right)$$
.

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

8. Find
$$\tan\left(\frac{23\pi}{6}\right)$$
.

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

9. Given
$$\triangle ABC$$
 right angled at B and $\angle ACB = \frac{\pi}{3}$. If $AC = 10$ find AB .

$$AB = 5\sqrt{3}$$
.

10. Given
$$\triangle ABC$$
 right angled at B and $\angle ACB = \frac{\pi}{4}$. If $BC = 3$ find AC .

$$AC = 3\sqrt{2}$$
.

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