



# Precalculus: Trigonometric Functions

Name \_\_\_\_\_ Date \_\_\_\_\_

Find the trigonometric value of the special angles given in radians

(1)  $\sec \pi$

(2)  $\cot 0$

(3)  $\sec \frac{7\pi}{6}$

(4)  $\csc \frac{2\pi}{3}$

(5)  $\sin \frac{\pi}{6}$

(6)  $\csc \frac{2\pi}{3}$

(7)  $\sin \pi$

(8)  $\tan \frac{\pi}{2}$

(9)  $\sin \frac{7\pi}{4}$

(10)  $\cot \pi$

(11)  $\sin \frac{2\pi}{3}$

(12)  $\csc \frac{\pi}{3}$



## Answers

Find the trigonometric value of the special angles given in radians

$$(1) \quad \sec \pi$$

$$= -1$$

$$(3) \quad \sec \frac{7\pi}{6}$$

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

$$(5) \quad \sin \frac{\pi}{6}$$

$$= \frac{1}{2}$$

$$(7) \quad \sin \pi$$

$$= 0$$

$$(9) \quad \sin \frac{7\pi}{4}$$

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

$$(11) \quad \sin \frac{2\pi}{3}$$

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

$$(2) \quad \cot 0$$

$$= \infty$$

$$(4) \quad \csc \frac{2\pi}{3}$$

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

$$(6) \quad \csc \frac{2\pi}{3}$$

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

$$(8) \quad \tan \frac{\pi}{2}$$

$$= \infty$$

$$(10) \quad \cot \pi$$

$$= \infty$$

$$(12) \quad \csc \frac{\pi}{3}$$

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