



## Precalculus: Trigonometric Functions

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

Find the trigonometric value of the special angles given in radians

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

(2)  $\csc \frac{5\pi}{6}$

(3)  $\cot \frac{\pi}{6}$

(4)  $\cos 0$

(5)  $\tan \frac{2\pi}{3}$

(6)  $\tan \frac{4\pi}{3}$

(7)  $\sec \frac{5\pi}{4}$

(8)  $\sec \frac{3\pi}{2}$

(9)  $\sec \frac{11\pi}{6}$

(10)  $\cos \frac{5\pi}{3}$

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

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



## Answers

Find the trigonometric value of the special angles given in radians

$$(1) \quad \csc \frac{3\pi}{2}$$

$$= -1$$

$$(3) \quad \cot \frac{\pi}{6}$$

$$= \sqrt{3}$$

$$(5) \quad \tan \frac{2\pi}{3}$$

$$= -\sqrt{3}$$

$$(7) \quad \sec \frac{5\pi}{4}$$

$$= -\sqrt{2}$$

$$(9) \quad \sec \frac{11\pi}{6}$$

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

$$(11) \quad \cos \frac{11\pi}{6}$$

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

$$(2) \quad \csc \frac{5\pi}{6}$$

$$= 2$$

$$(4) \quad \cos 0$$

$$= 1$$

$$(6) \quad \tan \frac{4\pi}{3}$$

$$= \sqrt{3}$$

$$(8) \quad \sec \frac{3\pi}{2}$$

$$= \infty$$

$$(10) \quad \cos \frac{5\pi}{3}$$

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

$$(12) \quad \tan \frac{\pi}{2}$$

$$= \infty$$