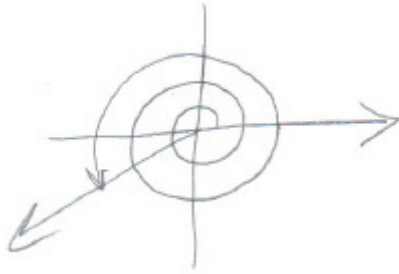


## Chapter 6 Practice Quiz Answers

### C6CQ1:

1.



3.  $\frac{5\pi}{3}$

5.  $s = 4 \text{ m}$

7.  $\theta = \frac{5}{2}$

9.  $r = 4\sqrt{5} \text{ ft}$

2.



4.  $162^\circ$

6.  $r = 18 \text{ ft}$

8.  $A = 54 \text{ in}^2$

10.  $\theta = \frac{8}{9}$

C6CQ2:

1. 1

2. undefined

3. 0

4. 1

5. -1

6. 0

7.  $\sin \frac{17\pi}{6} = \frac{1}{2}$

$\csc \frac{17\pi}{6} = 2$

$\cos \frac{17\pi}{6} = \frac{-\sqrt{3}}{2}$

$\sec \frac{17\pi}{6} = \frac{-2\sqrt{3}}{3}$

$\tan \frac{17\pi}{6} = \frac{-\sqrt{3}}{3}$

$\cot \frac{17\pi}{6} = -\sqrt{3}$

8.  $\sin 990^\circ = -1$

$\csc 990^\circ = -1$

$\cos 990^\circ = 0$

$\sec 990^\circ = \text{undefined}$

$\tan 990^\circ = \text{undefined}$

$\cot 990^\circ = 0$

9.  $\sin \theta = \frac{-12}{13}$

$\csc \theta = \frac{-13}{12}$

$\cos \theta = \frac{5}{13}$

$\sec \theta = \frac{13}{5}$

$\tan \theta = \frac{-12}{5}$

$\cot \theta = \frac{-5}{12}$

C6CQ3:

1. II

2. IV

$$3. \tan \theta = \frac{1}{2}$$

$$\sec \theta = \frac{-\sqrt{5}}{2}$$

$$\csc \theta = -\sqrt{5}$$

$$\cot \theta = 2$$

$$4. \sin \theta = \frac{12}{13}$$

$$\tan \theta = \frac{-12}{5}$$

$$\csc \theta = \frac{13}{12}$$

$$\sec \theta = \frac{-13}{5}$$

$$\cot \theta = \frac{-5}{12}$$

$$5. \sin \theta = \frac{1}{2}$$

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

$$\tan \theta = \frac{-\sqrt{3}}{3}$$

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

$$\cot \theta = -\sqrt{3}$$

$$6. \sqrt{3}$$

$$7. \frac{-2\sqrt{3}}{3}$$

$$8. \frac{\sqrt{3}}{2}$$

$$9. \sqrt{2}$$

### C6CQ4:

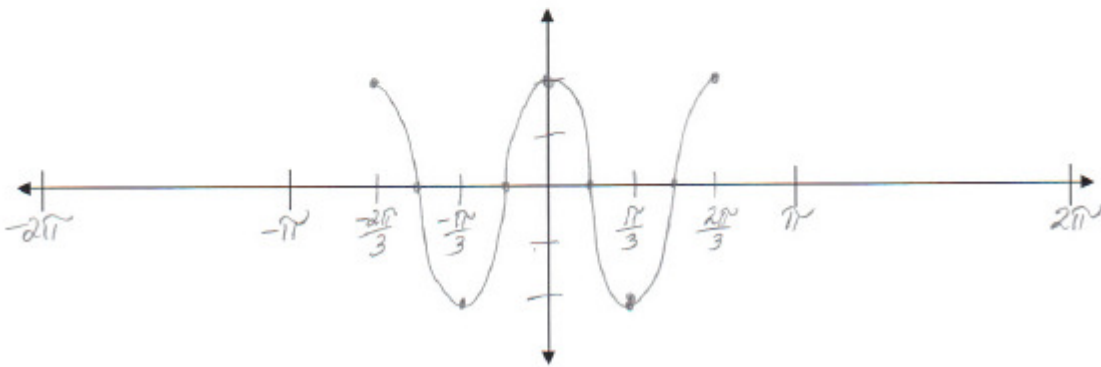
1. State the amplitude and period for the function:  $f(x) = \frac{-5}{3} \sin(6x)$ .

$$\text{AMP} = \frac{5}{3} \quad \text{PERIOD} = \frac{2\pi}{6} = \frac{\pi}{3}$$

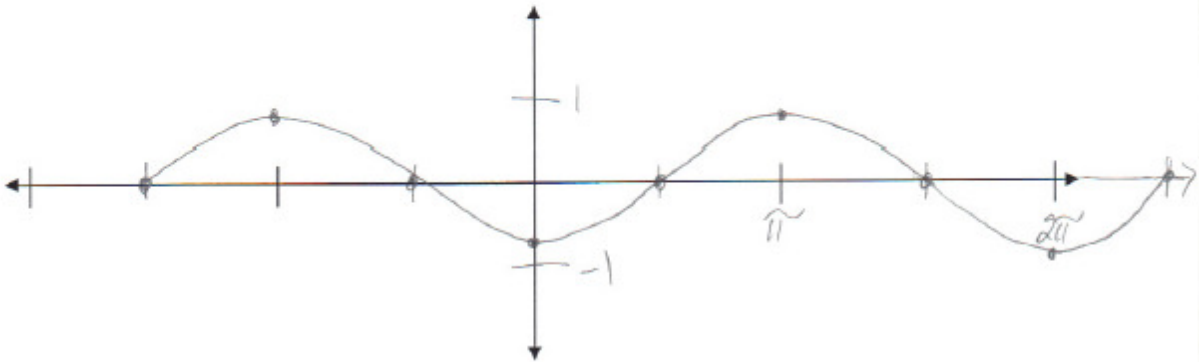
\* State the amplitude and period.

\* Sketch the graph of the function. Include two full periods.

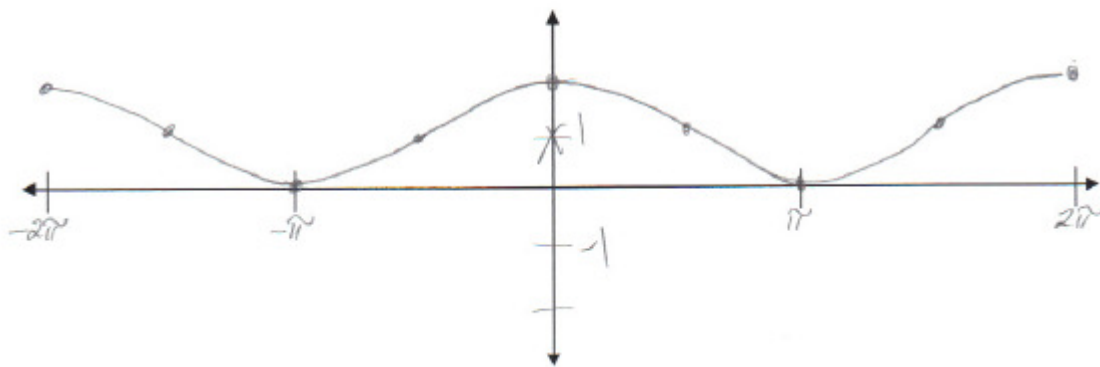
2.  $y = 2 \cos(3x)$     AMP = 2    PERIOD =  $\frac{2\pi}{3}$



3.  $f(x) = \frac{3}{4} \sin\left(x - \frac{\pi}{2}\right)$     AMP =  $\frac{3}{4}$     PERIOD =  $2\pi$     RIGHT  $\frac{\pi}{2}$



4.  $y = \cos(x) + 1$     AMP = 1    PERIOD =  $2\pi$     UP 1



5.  $y = \sin \pi x$     AMP = 1    PERIOD =  $\frac{2\pi}{\pi} = 2$

