

Name Key

Amplitude and Period: Graphing Trig Functions

Find the amplitude and period of each function.

1. $y = \sin \theta$ Amplitude 1 Period 2π 360°

6. $y = -\sin \frac{3\theta}{2}$ Amplitude 1 Period $\frac{4\pi}{3}$ 240°
Flip

2. $y = 2\sin \theta$ Amplitude 2 Period 2π 360°

7. $y = \frac{2}{3}\sin 4\theta$ Amplitude $\frac{2}{3}$ Period $\frac{\pi}{2}$ 90°

3. $y = \frac{1}{2}\cos \theta$ Amplitude $\frac{1}{2}$ Period 2π 360°

8. $y = 3\sin \frac{2\theta}{3}$ Amplitude 3 Period 3π 540°

4. $y = \sin 5\theta$ Amplitude 1 Period $\frac{2\pi}{5}$ 72°

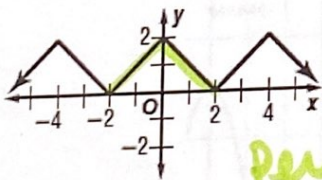
9. $y = -2\cos \frac{\theta}{4}$ Amplitude 2 Period 8π 1440°
Flip

5. $y = -3\cos \frac{\theta}{2}$ Amplitude 3 Period π 180°
(flip)

10. $y = \frac{3}{4}\cos \frac{3\theta}{2}$ Amplitude $\frac{3}{4}$ Period $\frac{4\pi}{3}$ 240°

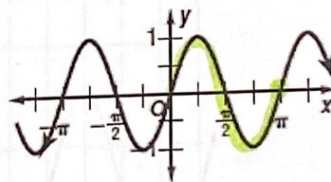
Find the period of each function by examining its graph.

a.



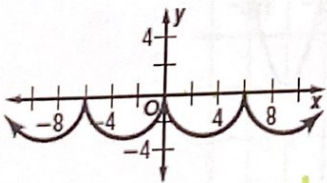
Period = 4

b.



Period = π
 So $B = 2$
 b/c
 $\frac{2\pi}{2} = \pi$

c.



Period = 4