Name Key

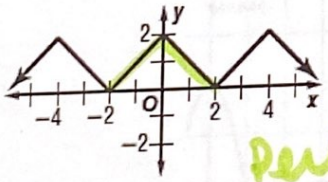
Amplitude and Period: Graphing Trig Functions

Find the amplitude and period or each function.

		Amplitude	*Period*
1.	$y = \sin\theta$	1	2π (360° degrees)
2.	$y = 2\sin\theta$	2	2π 360°
3.	$y = \frac{1}{2}\cos\theta$	$\frac{1}{2}$	2π 360°
4.	$y = \sin 5\theta$	1	$\frac{2\pi}{5}$ 72°
5.	$y = -3\cos\frac{\theta}{2}$	3 (flip)	4π 180°
6.	$y = -\sin\frac{3\theta}{2}$	1 Flip	$\frac{4\pi}{3}$ 240°
7.	$y = \frac{2}{3}\sin 4\theta$	$\frac{2}{3}$	$\frac{\pi}{2}$ 90°
8.	$y = 3\sin\frac{2\theta}{3}$	3	3π 540°
9.	$y = -2\cos\frac{\theta}{4}$	2 Flip	8π 1440°
10.	$y = \frac{3}{4}\cos\frac{3\theta}{2}$	$\frac{3}{4}$	$\frac{4\pi}{3}$ 240°

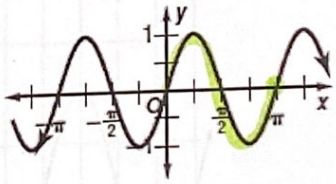
Find the period of each function by examining its graph.

a.



Period = 4

b.

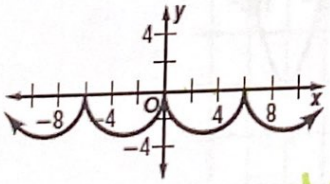


Period = π

So B = 2

b/c $\frac{2\pi}{2} = \pi$

c.



Period = 4