WS: Graphing Cosine Name Key

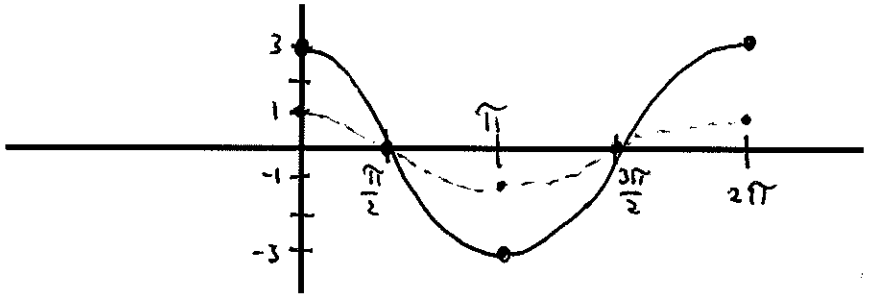
Graph the following cosine functions. Label tic marks. Period ____

1).

$y = 3 \cos(x)$

Amplitude = 3

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

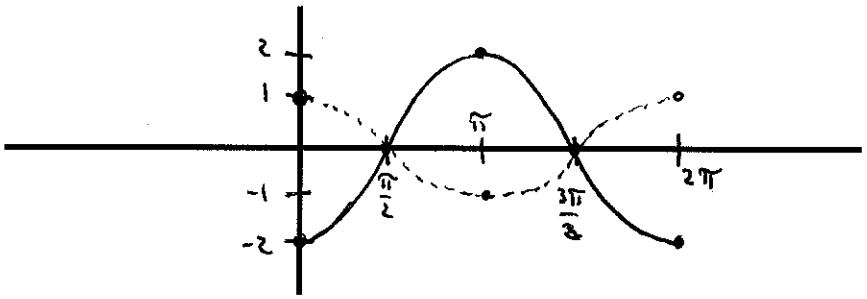


2).

$y = -2 \cos(x)$

Amplitude = 2

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

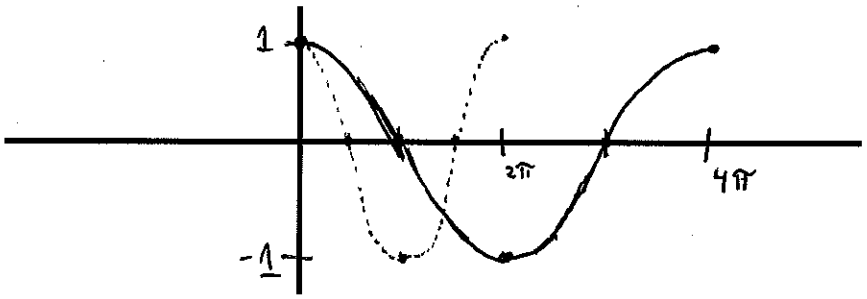


3).

$y = \cos \frac{1}{2}(x)$

Amplitude = 1

Period = $\frac{2\pi}{\frac{1}{2}} = 4\pi$

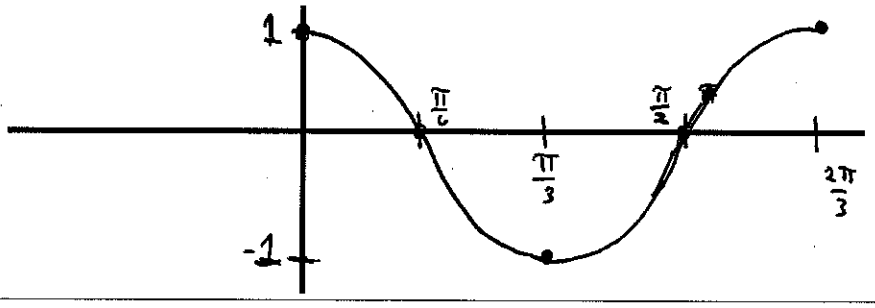


4).

$y = \cos 3(x)$

Amplitude = 1

Period = $\frac{2\pi}{3}$

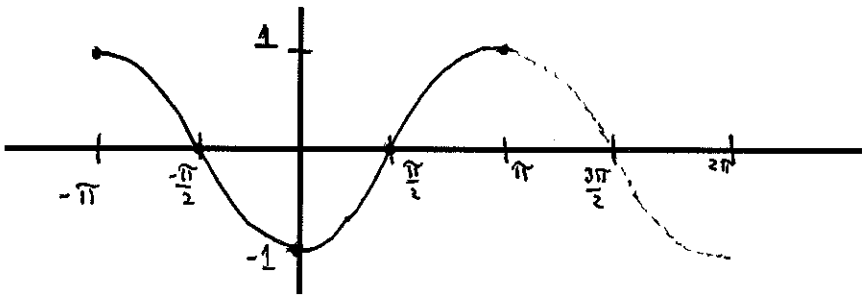


5).

$y = \cos(x + \pi)$

Amplitude = 1

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

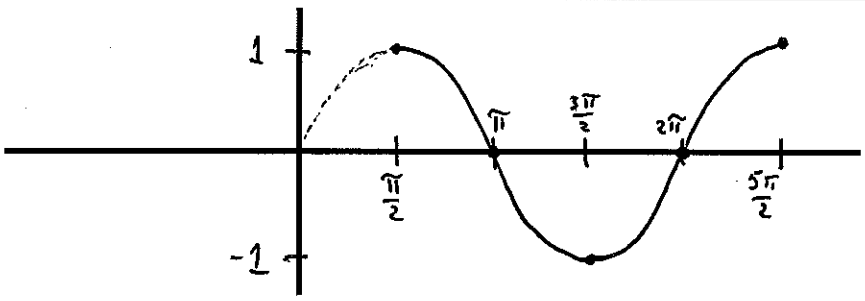


6).

$y = \cos(x - \pi/2)$

Amplitude = 1

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

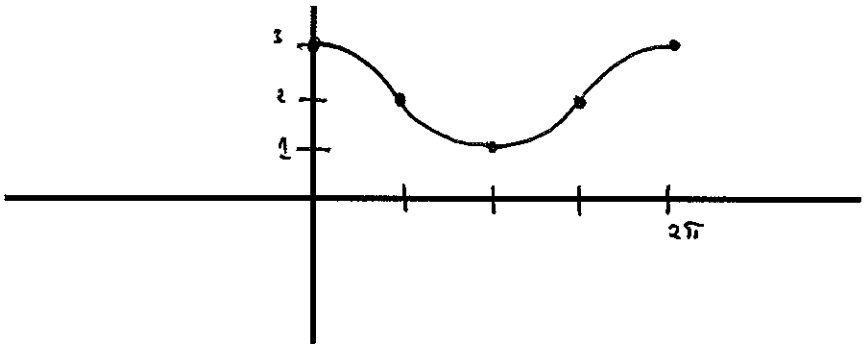


7).

$y = \cos(x) + 2$

Amplitude = 1

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

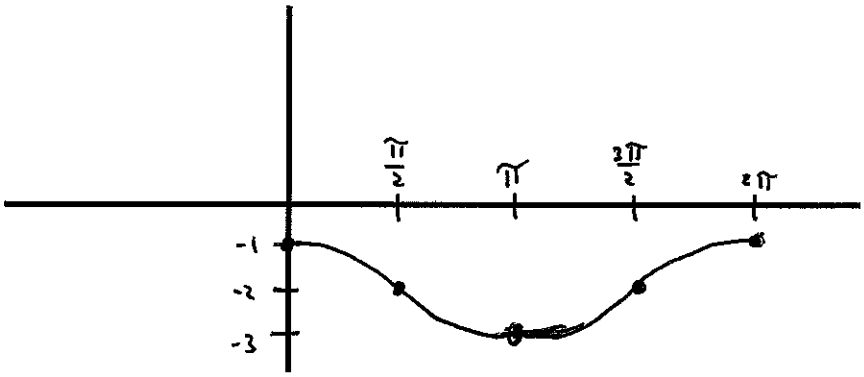


8).

$y = -2 + \cos(x)$

Amplitude = ~~4~~ 1

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

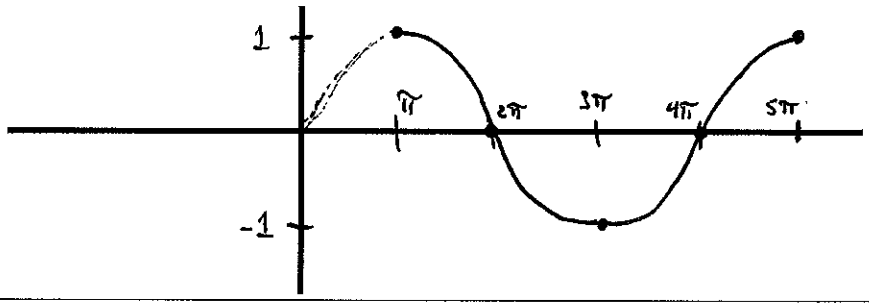


9).

$y = \cos \frac{1}{2}(x - \pi)$

Amplitude = 1

Period = $\frac{2\pi}{1/2} = 4\pi$



10).

$y = \cos(4x + \frac{1}{2}\pi)$

factor out the B term

$y = \cos\left(4\left(x + \frac{\pi}{8}\right)\right)$

Amplitude = 1

Period = $\frac{2\pi}{4} = \frac{\pi}{2}$