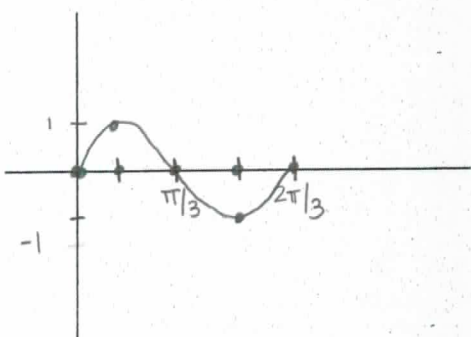


Determine the amplitude and period for the following functions. Then sketch the graph including at least one period.

1)  $y = \sin(3x)$

Amplitude = 1

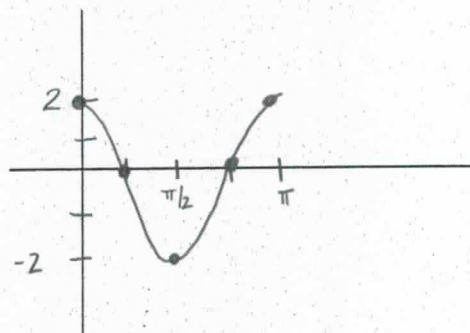
Period =  $\frac{2\pi}{3}$



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

Amplitude = 2

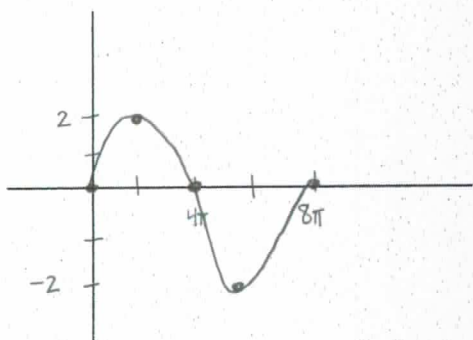
Period =  $\pi$



3)  $y = 2 \sin\left(\frac{1}{4}x\right)$

Amplitude = 2

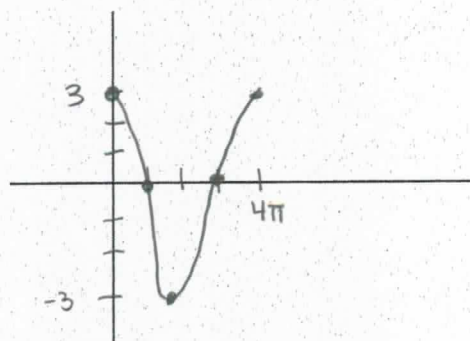
Period =  $8\pi$



4)  $y = 3 \cos\left(\frac{1}{2}x\right)$

Amplitude = 3

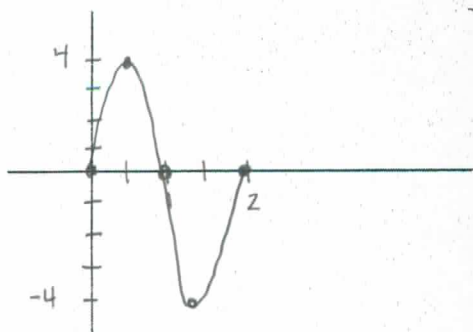
Period =  $4\pi$



5)  $y = 4 \sin(\pi x)$

Amplitude = 4

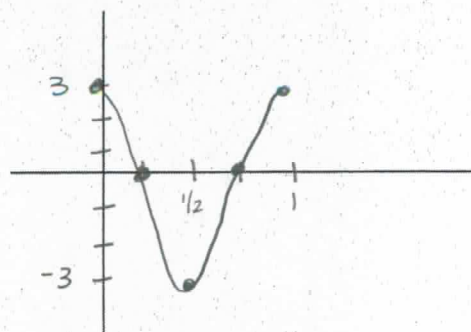
Period = 2



6)  $y = 3 \cos(2\pi x)$

Amplitude = 3

Period = 1



Find the value of each trigonometric value

$\sin 0^\circ$ <u>0</u>	$\tan \frac{\pi}{2}$ <u>und.</u>	$\sec \pi$ <u>-1</u>	$\cot 0^\circ$ <u>und.</u>	$\csc 45^\circ$ <u><math>\sqrt{2}</math></u>	$\cos \frac{\pi}{2}$ <u>0</u>	$\cot \frac{\pi}{6}$ <u><math>\sqrt{3}</math></u>
$\sin \frac{2\pi}{3}$ <u><math>\frac{\sqrt{3}}{2}</math></u>	$\tan 60^\circ$ <u><math>\sqrt{3}</math></u>	$\csc \frac{\pi}{3}$ <u><math>\frac{2}{\sqrt{3}}</math></u>	$\cos 30^\circ$ <u><math>\frac{\sqrt{3}}{2}</math></u>	$\sec 60^\circ$ <u>2</u>	$\csc 0^\circ$ <u>und.</u>	$\cot 90^\circ$ <u>0</u>
$\sin 60^\circ$ <u><math>\frac{\sqrt{3}}{2}</math></u>	$\cos \frac{\pi}{3}$ <u><math>\frac{1}{2}</math></u>	$\sec \frac{\pi}{2}$ <u>und.</u>	$\tan 135^\circ$ <u>-1</u>	$\sec 45^\circ$ <u><math>\sqrt{2}</math></u>	$\csc \frac{5\pi}{6}$ <u>2</u>	$\cos 45^\circ$ <u><math>\frac{\sqrt{2}}{2}</math></u>
$\sin \frac{\pi}{4}$ <u><math>\frac{\sqrt{2}}{2}</math></u>	$\tan \frac{\pi}{4}$ <u>1</u>	$\cot \frac{\pi}{3}$ <u><math>\frac{\sqrt{3}}{3}</math></u>	$\tan 0^\circ$ <u>0</u>	$\cos 0^\circ$ <u>1</u>	$\cot 45^\circ$ <u>1</u>	$\sec \frac{\pi}{6}$ <u><math>\frac{2}{\sqrt{3}}</math></u>
$\sin 90^\circ$ <u>1</u>	$\csc 30^\circ$ <u>2</u>	$\cos 120^\circ$ <u><math>-\frac{1}{2}</math></u>	$\sec 0^\circ$ <u>1</u>	$\csc \frac{\pi}{2}$ <u>1</u>	$\tan \frac{\pi}{3}$ <u><math>\sqrt{3}</math></u>	$\cot \frac{3\pi}{4}$ <u>-1</u>
$\sin \frac{\pi}{6}$ <u><math>\frac{1}{2}</math></u>	$\sin 150^\circ$ <u><math>\frac{1}{2}</math></u>	$\tan \frac{5\pi}{6}$ <u><math>-\frac{\sqrt{3}}{3}</math></u>	$\sec \frac{5\pi}{3}$ <u>2</u>	$\cot 150^\circ$ <u><math>-\sqrt{3}</math></u>	$\csc 180^\circ$ <u>und.</u>	$\cos \frac{4\pi}{3}$ <u><math>-\frac{1}{2}</math></u>
$\cot \frac{11\pi}{6}$ <u><math>-\sqrt{3}</math></u>	$\sin \frac{4\pi}{3}$ <u><math>-\frac{\sqrt{3}}{2}</math></u>	$\tan 210^\circ$ <u><math>\frac{\sqrt{3}}{3}</math></u>	$\csc \frac{11\pi}{6}$ <u>-2</u>	$\cos 225^\circ$ <u><math>-\frac{\sqrt{2}}{2}</math></u>	$\sec 240^\circ$ <u>-2</u>	$\csc 135^\circ$ <u><math>\sqrt{2}</math></u>
$\cot 180^\circ$ <u>und.</u>	$\sin 300^\circ$ <u><math>-\frac{\sqrt{3}}{2}</math></u>	$\cos \frac{7\pi}{4}$ <u><math>\frac{\sqrt{2}}{2}</math></u>	$\sec \frac{3\pi}{4}$ <u><math>-\sqrt{2}</math></u>	$\tan 315^\circ$ <u>-1</u>	$\sec 150^\circ$ <u><math>\frac{-2}{\sqrt{3}}</math></u>	$\csc \frac{3\pi}{2}$ <u>-1</u>
$\cos 240^\circ$ <u><math>-\frac{1}{2}</math></u>	$\sin \frac{11\pi}{6}$ <u><math>-\frac{1}{2}</math></u>	$\tan \frac{5\pi}{4}$ <u>1</u>	$\cot \frac{5\pi}{3}$ <u><math>-\frac{\sqrt{3}}{3}</math></u>	$\tan 300^\circ$ <u><math>-\sqrt{3}</math></u>	$\cos \frac{7\pi}{6}$ <u><math>-\frac{\sqrt{3}}{2}</math></u>	$\cot 240^\circ$ <u><math>\frac{\sqrt{3}}{3}</math></u>
$\sec \frac{5\pi}{4}$ <u><math>-\sqrt{2}</math></u>	$\sin 270^\circ$ <u>-1</u>	$\csc 315^\circ$ <u><math>-\sqrt{2}</math></u>	$\cos 330^\circ$ <u><math>\frac{\sqrt{3}}{2}</math></u>	$\sec 120^\circ$ <u>-2</u>	$\csc \frac{7\pi}{6}$ <u>-2</u>	$\tan \frac{3\pi}{2}$ <u>und.</u>