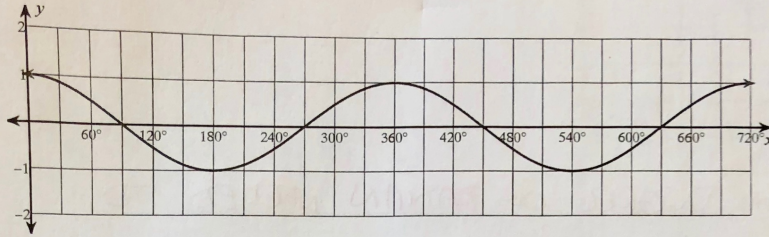


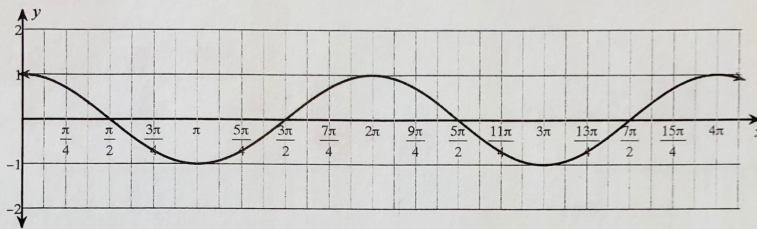
Graphs of Sin & Cos - NOTES

1)

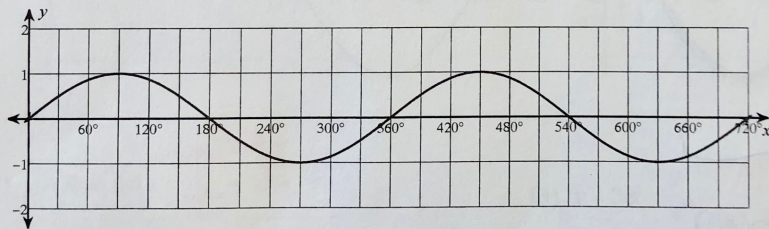


$y = \cos \theta$

2)

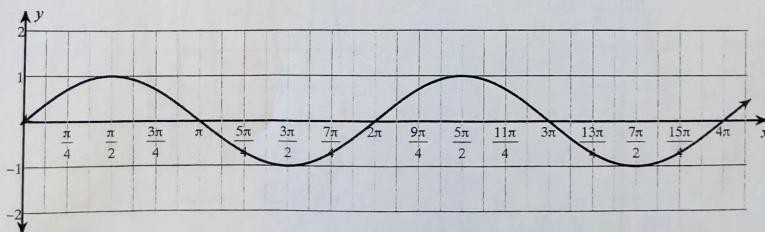


3)



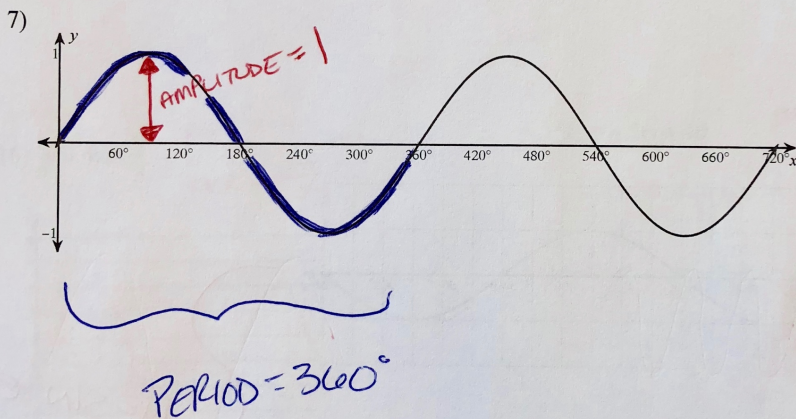
$y = \sin \theta$

4)



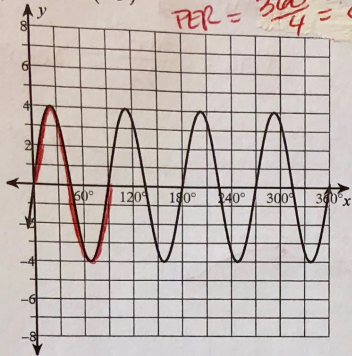
5) The AMPLITUDE of a graph is its HEIGHT TO THE TOP POINT
FROM THE X-AXIS.

6) The PERIOD of a graph is its DEGREE OR RADIAN NEEDED TO
COMPLETE ONE FULL CYCLE

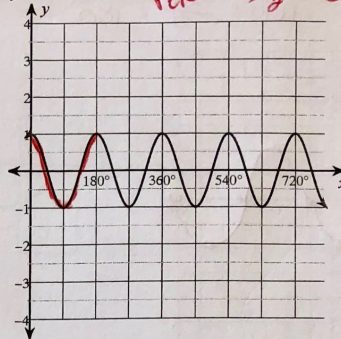


State the amplitude and period of each function.

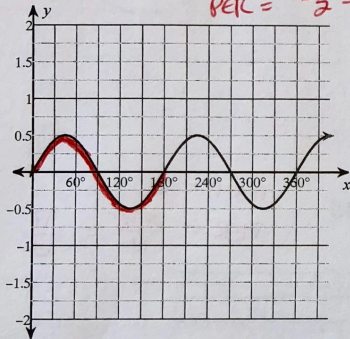
8) $y = 4\sin(4\theta)$ AMP = 4
PER = $\frac{360^\circ}{4} = 90^\circ$



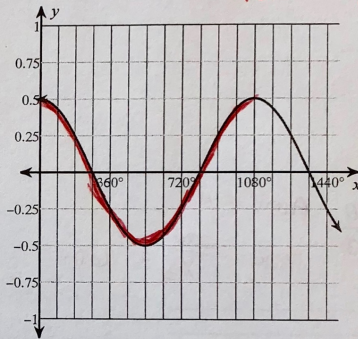
9) $y = \cos 2\theta$ AMP = 1
PER = $\frac{360^\circ}{2} = 180^\circ$



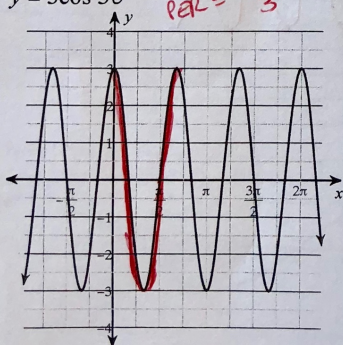
10) $y = \frac{1}{2} \cdot \sin 2\theta$ AMP = $\frac{1}{2}$
PER = $\frac{360^\circ}{2} = 180^\circ$



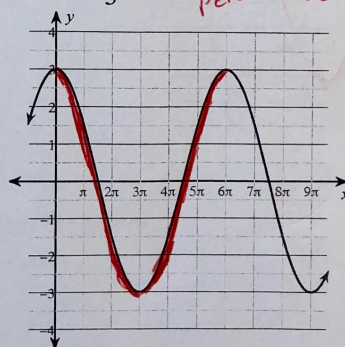
11) $y = \frac{1}{2} \cdot \cos \frac{\theta}{3}$ AMP = $\frac{1}{2}$
PER = $\frac{360^\circ}{1/3} = 360^\circ \cdot 3 = 1080^\circ$



12) $y = 3\cos 3\theta$ AMP = 3
PER = $\frac{2\pi}{3}$



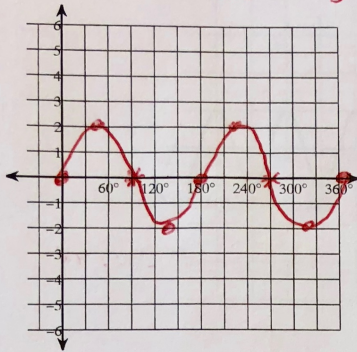
13) $y = 3\cos \frac{\theta}{3}$ AMP = 3
PER = $\frac{2\pi}{1/3} = 2\pi \cdot 3 = 6\pi$



Find the amplitude and period of each function. Then graph.

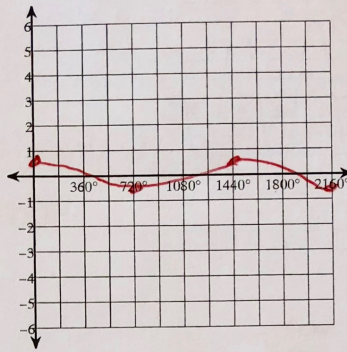
14) $y = 2\sin 2\theta$

AMP = 2
PER = $\frac{360^\circ}{2} = 180^\circ$



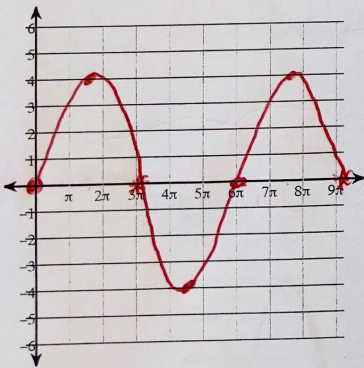
15) $y = \frac{1}{2} \cdot \cos \frac{\theta}{4}$

AMP = $\frac{1}{2}$
PER = $\frac{360^\circ}{\frac{1}{4}} = 360^\circ \cdot 4$
 $= 1440^\circ$



16) $y = 4\sin \frac{\theta}{3}$

AMP = 4
PER = $\frac{2\pi}{\frac{1}{3}} = 6\pi$



17) $y = 2\cos 4\theta$

AMP = 2
PER = $\frac{2\pi}{4} = \frac{\pi}{2}$

