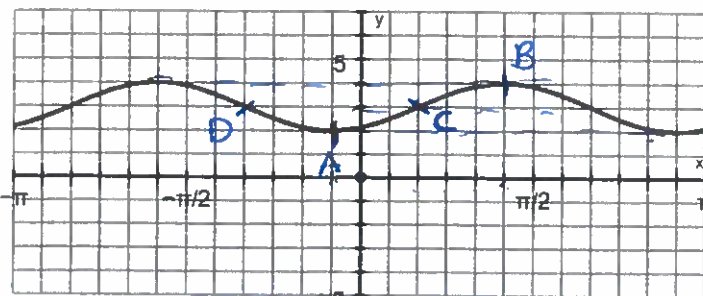
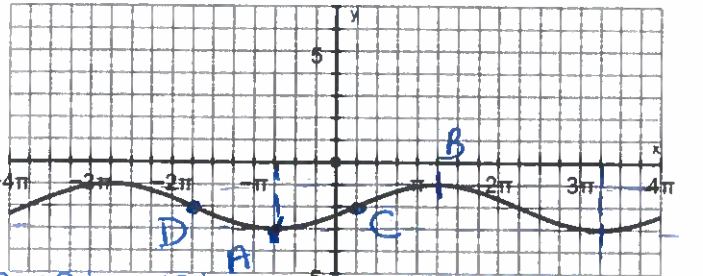
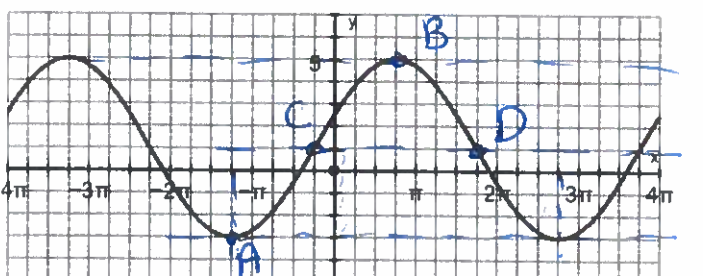
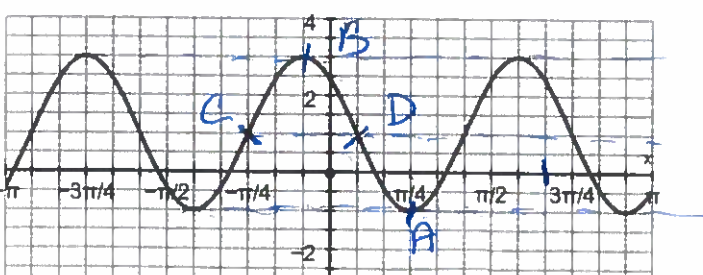




## Getting the Equation From the Graph

Find the FOUR trigonometric Equations that describe the following graphs

Graph	FOUR Trigonometric Equation
 <p>Amp 1 VS 1 Period <math>\frac{\pi}{2} \therefore HS \frac{1}{4}</math> SA: <math>y=3</math> VT 3</p>	<p>A/ <math>y = -\cos x \left(HT - \frac{\pi}{12}\right)</math> <math>y = -\cos\left[4\left(x + \frac{\pi}{12}\right)\right] + 3</math></p> <p>B/ <math>y = \cos x \left(HT + \frac{5\pi}{12}\right)</math> <math>y = \cos\left[4\left(x - \frac{5\pi}{12}\right)\right] + 3</math></p> <p>C/ <math>y = \sin x \left(HT \frac{\pi}{6}\right)</math> <math>y = \sin\left[4\left(x + \frac{\pi}{6}\right)\right] + 3</math></p> <p>D/ <math>y = -\sin x \left(HT - \frac{\pi}{3}\right)</math> <math>y = -\sin\left(4\left(x + \frac{\pi}{3}\right)\right) + 3</math></p>
 <p>Amp 1 VS 1 Period <math>4\pi \therefore HS 2</math> SA: <math>y=-2</math> VT -2</p>	<p>A/ <math>y = -\cos x \left(HT - \frac{3\pi}{4}\right)</math> <math>y = -\cos\left[\frac{1}{4}\left(x + \frac{3\pi}{4}\right)\right] - 2</math></p> <p>B/ <math>y = \cos x \left(HT \frac{5\pi}{4}\right)</math> <math>y = \cos\left[\frac{1}{4}\left(x - \frac{5\pi}{4}\right)\right] - 2</math></p> <p>C/ <math>y = \sin x \left(HT \frac{\pi}{4}\right)</math> <math>y = \sin\left[\frac{1}{4}\left(x - \frac{\pi}{4}\right)\right] - 2</math></p> <p>D/ <math>y = -\sin x \left(HT - \frac{\pi}{4}\right)</math> <math>y = -\sin\left[\frac{1}{4}\left(x + \frac{\pi}{4}\right)\right] - 2</math></p>
 <p>Amp 4 VS 4 Period <math>4\pi \therefore HS 2</math> SA: <math>y=1</math> VT 1</p>	<p>A/ <math>y = -\cos x \left(HT - \frac{5\pi}{4}\right)</math> <math>y = -4\cos\left[\frac{1}{4}\left(x + \frac{5\pi}{4}\right)\right] + 1</math></p> <p>B/ <math>y = \cos x \left(HT \frac{3\pi}{4}\right)</math> <math>y = 4\cos\left[\frac{1}{4}\left(x - \frac{3\pi}{4}\right)\right] + 1</math></p> <p>C/ <math>y = \sin x \left(HT - \frac{\pi}{4}\right)</math> <math>y = 4\sin\left[\frac{1}{4}\left(x + \frac{\pi}{4}\right)\right] + 1</math></p> <p>D/ <math>y = -\sin x \left(HT \frac{3\pi}{4}\right)</math> <math>y = -4\sin\left[\frac{1}{4}\left(x - \frac{3\pi}{4}\right)\right] + 1</math></p>
 <p>Amp 2 VS 2 Period: <math>\frac{2\pi}{3} \therefore HS \frac{1}{3}</math> SA: <math>y=1</math> VT 1</p>	<p>A/ <math>y = -\cos x \left(HT \frac{\pi}{4}\right)</math> <math>y = -2\cos\left[3\left(x - \frac{\pi}{4}\right)\right] + 1</math></p> <p>B/ <math>y = \cos x \left(HT - \frac{\pi}{6}\right)</math> <math>y = 2\cos\left[3\left(x + \frac{\pi}{6}\right)\right] + 1</math></p> <p>C/ <math>y = \sin x \left(HT - \frac{\pi}{4}\right)</math> <math>y = 2\sin\left[3\left(x + \frac{\pi}{4}\right)\right] + 1</math></p> <p>D/ <math>y = -\sin x \left(HT \frac{\pi}{6}\right)</math> <math>y = -2\sin\left[3\left(x - \frac{\pi}{6}\right)\right] + 1</math></p>