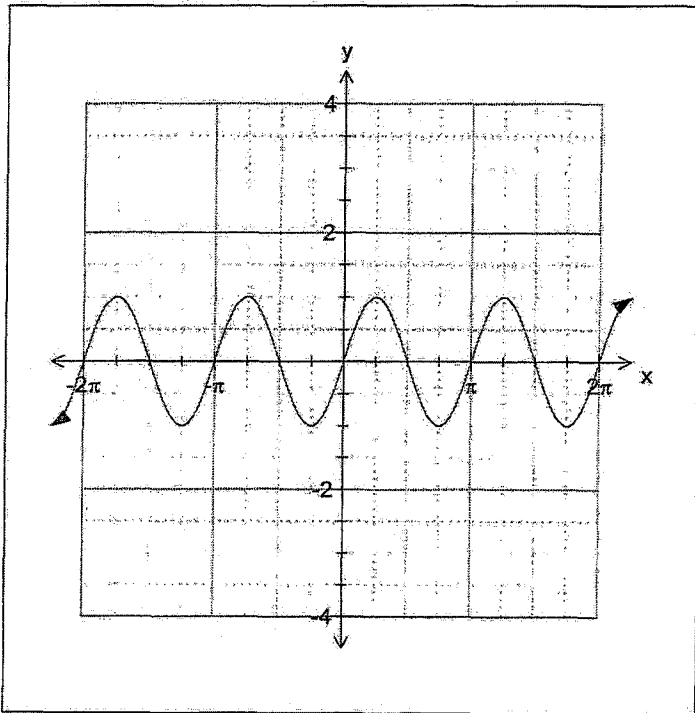


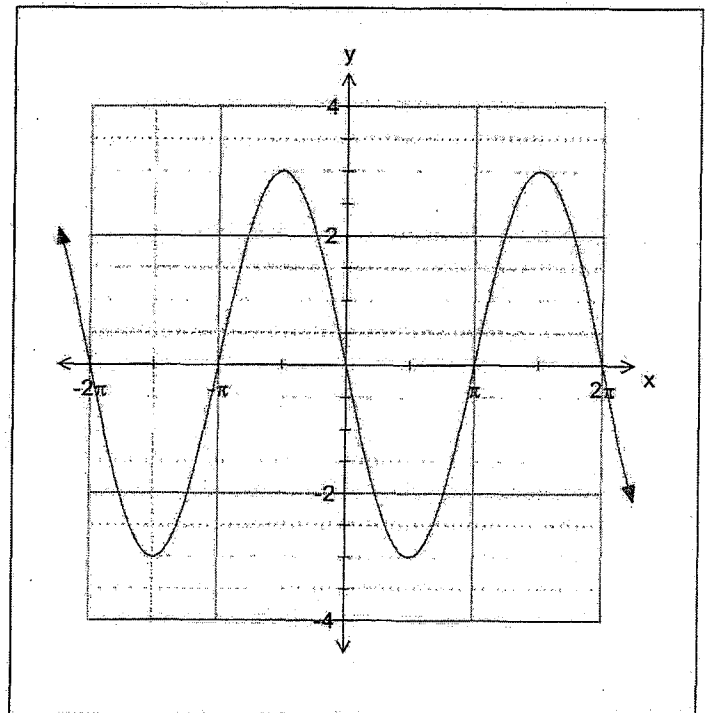
ANSWERS
for inclass

Writing Equations: Transformations of Trig-Functions B7

Write an equation for each of the following in terms of $y = a \sin[b(x - c)] + d$



$$y = \sin 2x$$

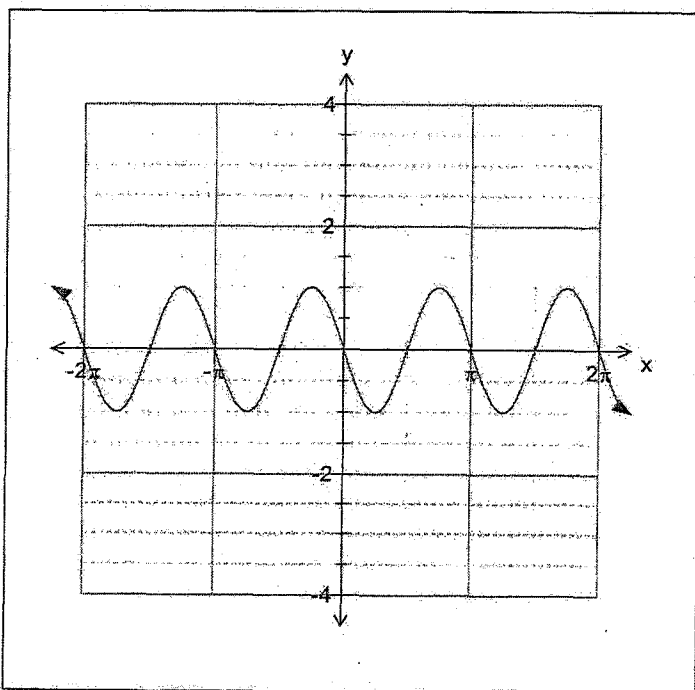


$$y = 3 \sin(x + \pi)$$

note: "c" could change

$$y = 3 \sin(x - \pi)$$

$$y = -3 \sin x$$



$$y = \sin 2(x + \frac{\pi}{2})$$

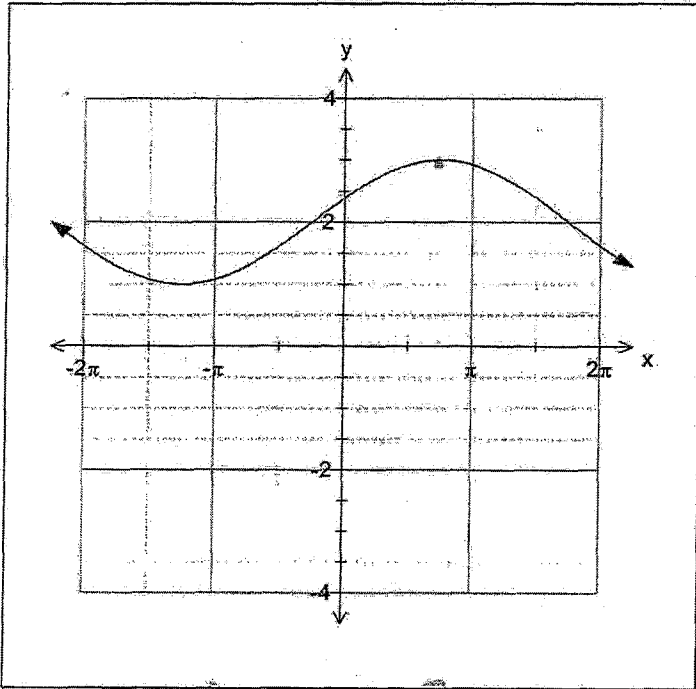
or

$$y = -\sin 2x$$

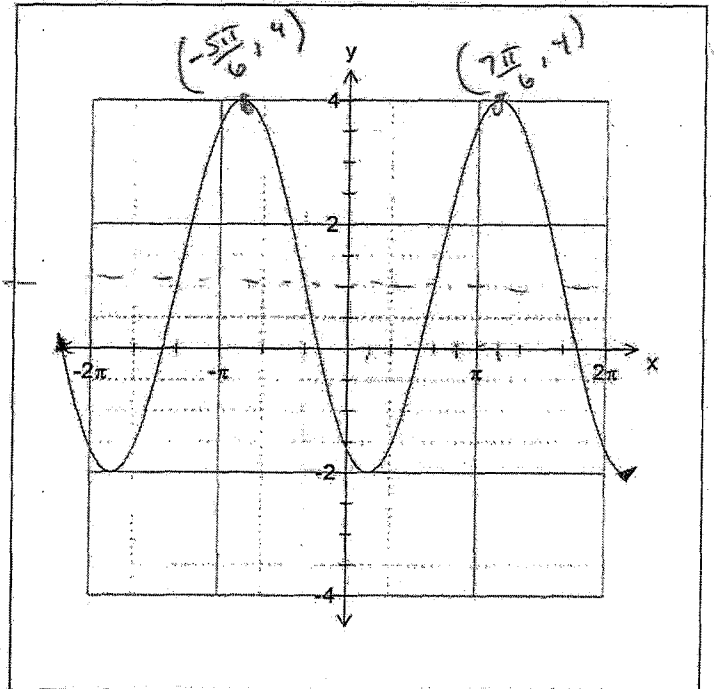
or

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

Write an equation for each of the following in terms of $y = a \cos[b(x - c)] + d$



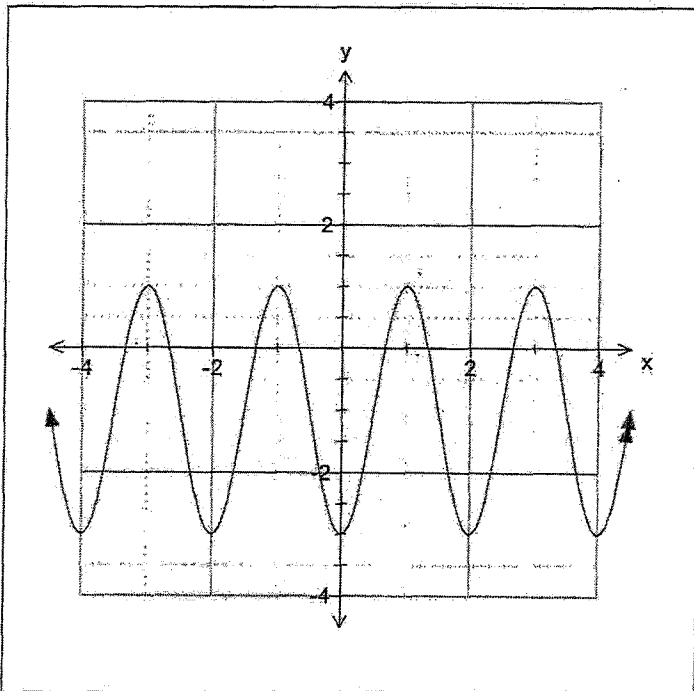
$$y = \cos\left[\frac{1}{2}\left(x - \frac{3\pi}{4}\right)\right] + 2$$



$$y = 3 \cos\left(x - \frac{7\pi}{6}\right) + 1$$

"c values may vary" or $y = 3 \cos\left(x + \frac{5\pi}{6}\right) + 1$

$$y = -3 \cos\left(x - \frac{\pi}{6}\right) + 1$$



$$y = 2 \cos[\pi(x - 1)] - 1$$

or

$$y = -2 \cos \pi x - 1$$

or

$$y = 2 \cos[\pi(x + 1)] - 1$$

many more possibilities