C12 - 5.1 - Sin Cos and Tan Graphs HW

Draw y = sinx
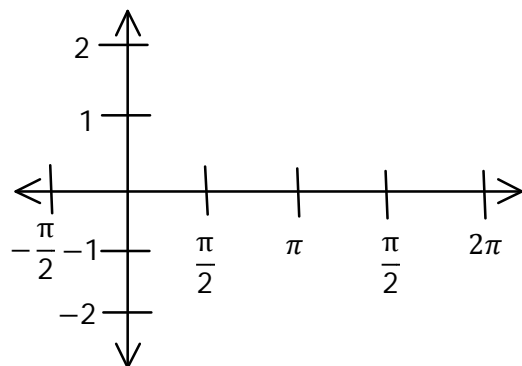

x	y
0	
$\dfrac{\pi}{2}$	
π	
$\dfrac{3\pi}{2}$	
2π	

Draw y = cosx

x	y
0	
$\dfrac{\pi}{2}$	
π	
$\dfrac{3\pi}{2}$	
2π	

Draw y = tanx

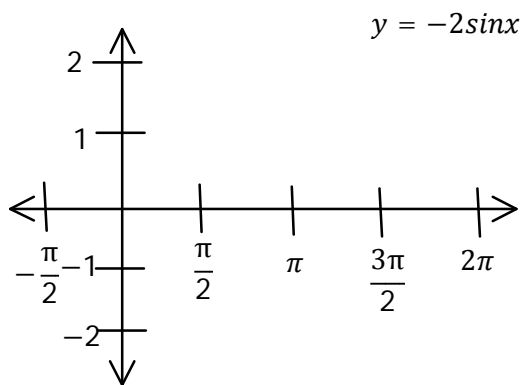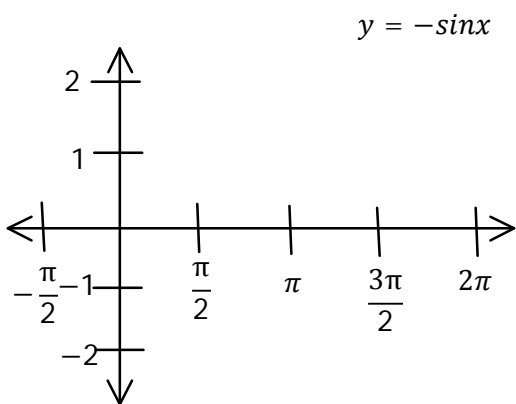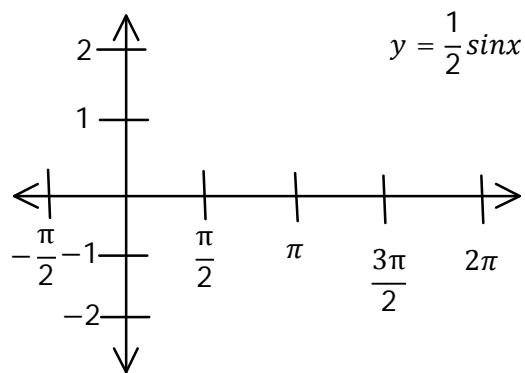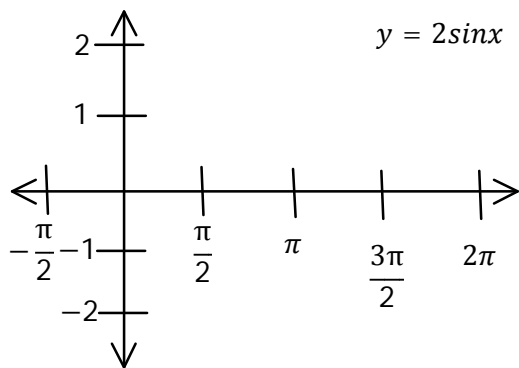| x	y
0	
$\dfrac{\pi}{4}$	
$\dfrac{\pi}{2}$	
$\dfrac{3\pi}{4}$	
π	
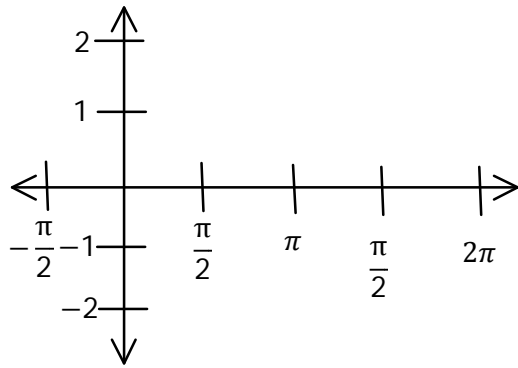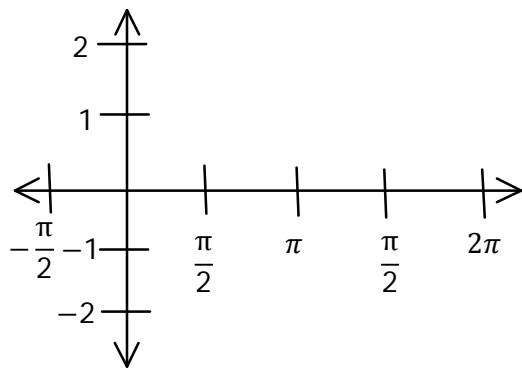
C12 - 5.2 - "a" Find Equation WS

Determine a, and the equation $y = a\sin x$
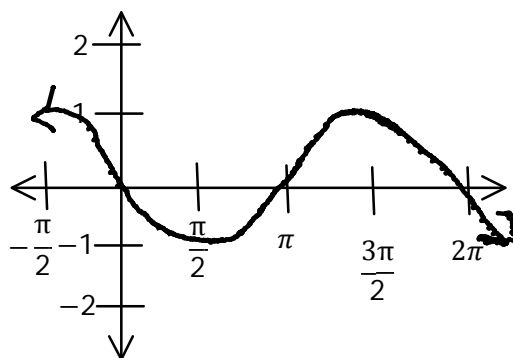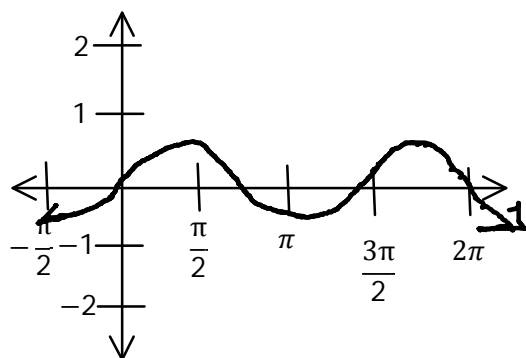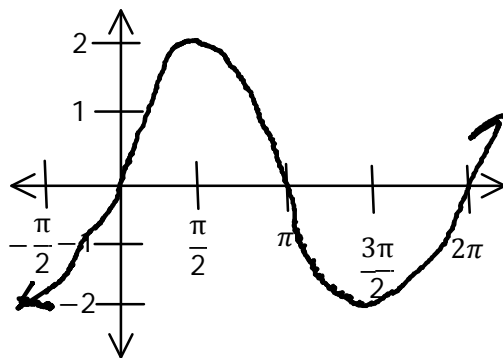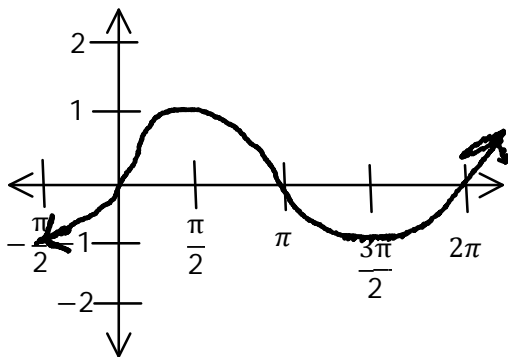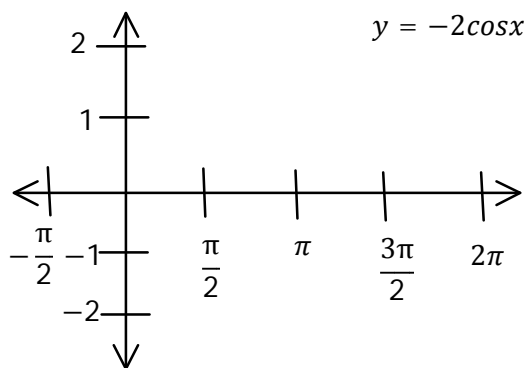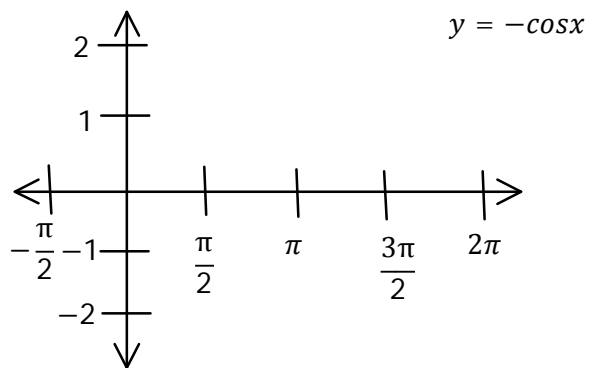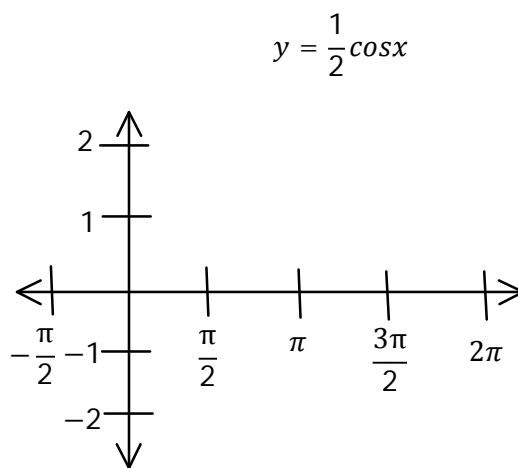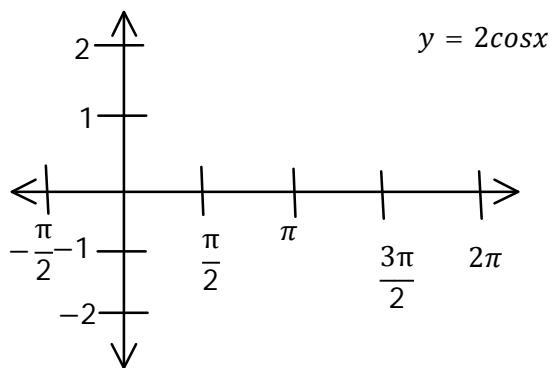

Determine a, and the equation $y = a\cos x$
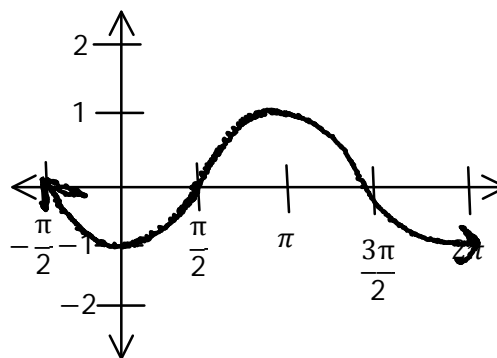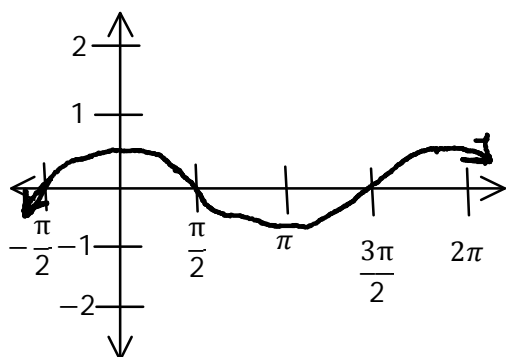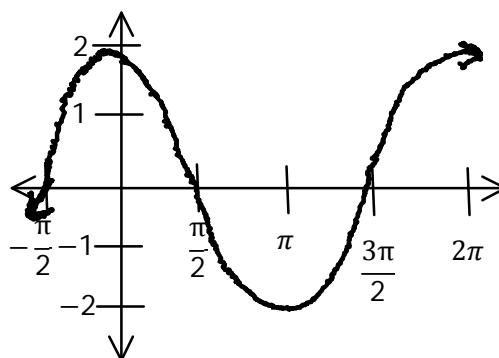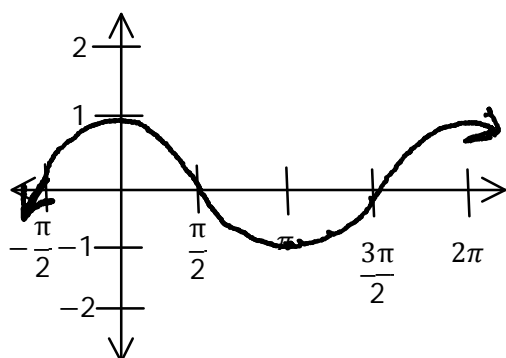
C12 - 5.2 - "a" Graphing WS

Determine a, and graph the equation $y = asinx$

$$y = 2sinx$$

$$y = \frac{1}{2}sinx$$

$$y = -sinx$$

$$y = -2sinx$$

Determine a, and graph the equation $y = acosx$

$$y = 2cosx$$

$$y = \frac{1}{2}cosx$$

$$y = -cosx$$

$$y = -2cosx$$

C12 - 5.2 - "b" Find Equation WS

Determine b, and the equation $y = sinbx$

$$p = \frac{2\pi}{b}$$

$$b = \frac{2\pi}{p}$$

$$b =$$

Determine b, and the equation $y = cosbx$
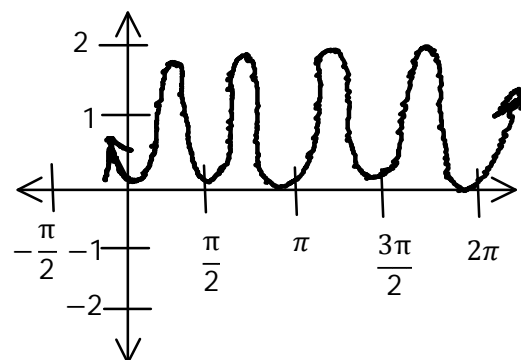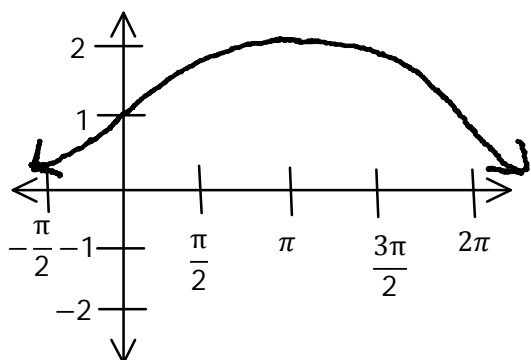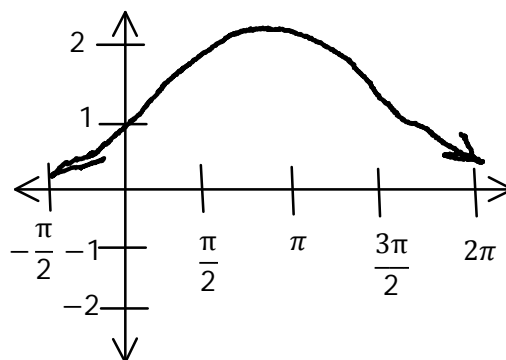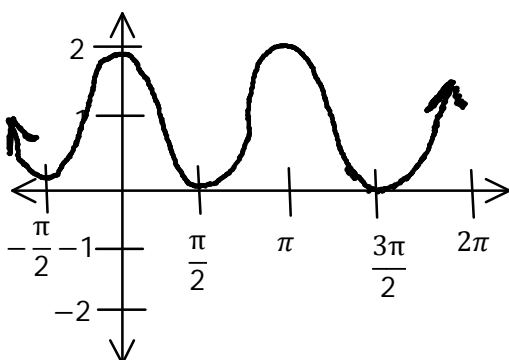
C12 - 5.2 - "b" Graphing WS
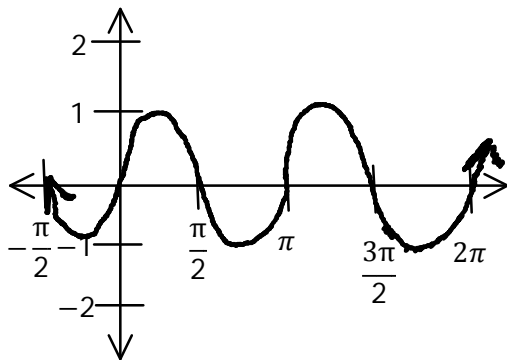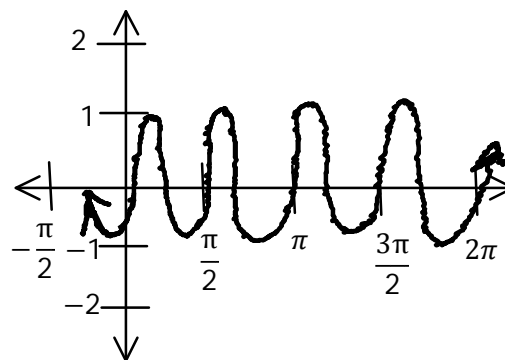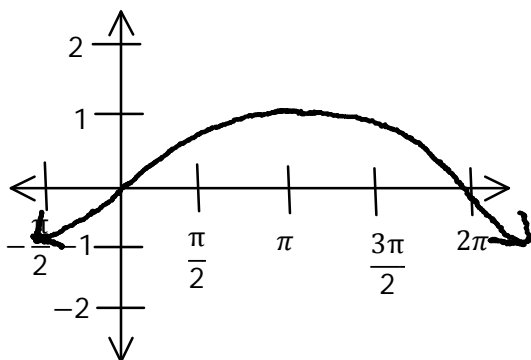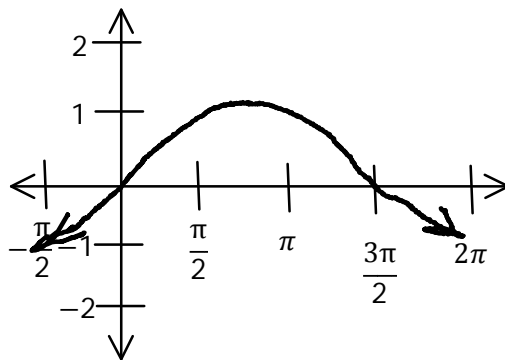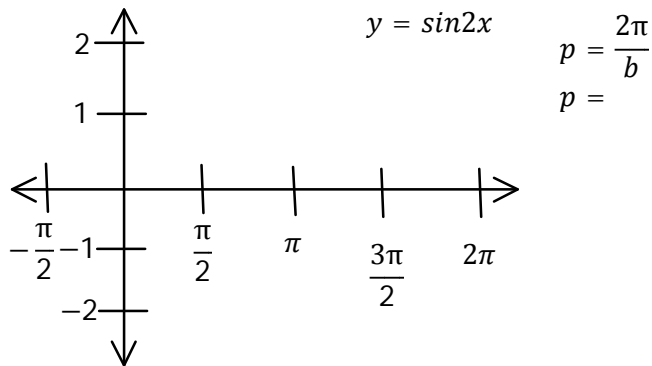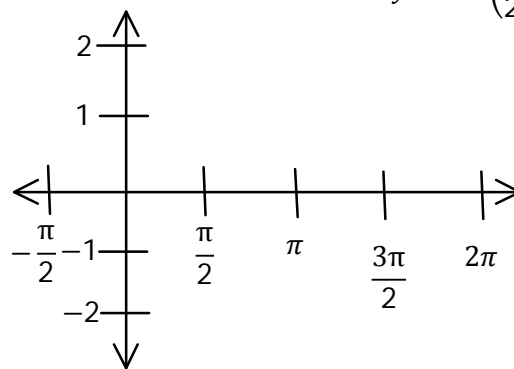
Determine b, and graph the equation $y = sinbx$
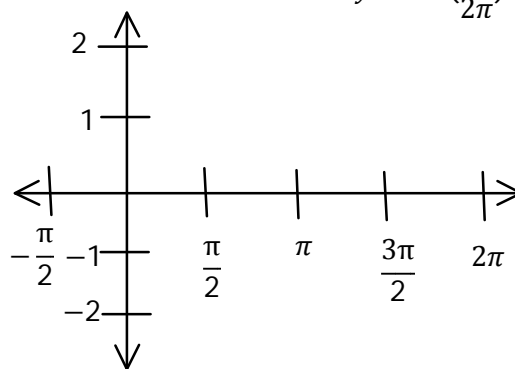
$y = \sin2x$

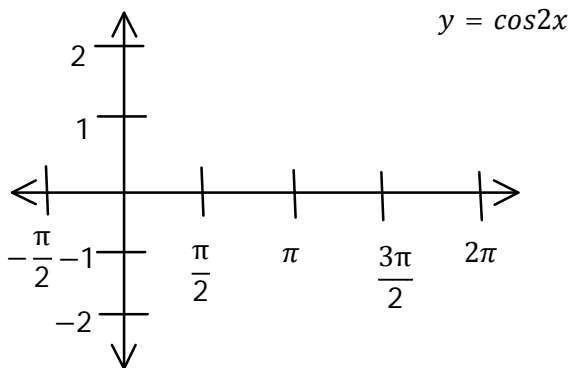$p = \dfrac{2\pi}{b}$

$p =$

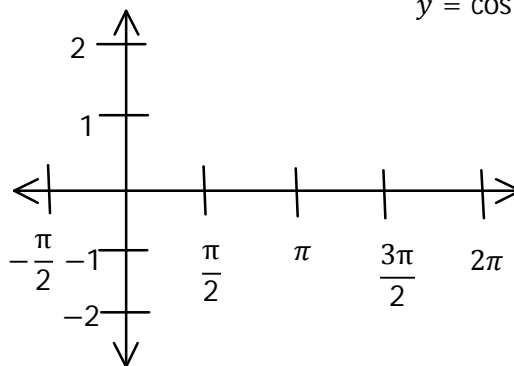$y = \sin\left(\dfrac{1}{2}\right)x$

$y = \sin3x$
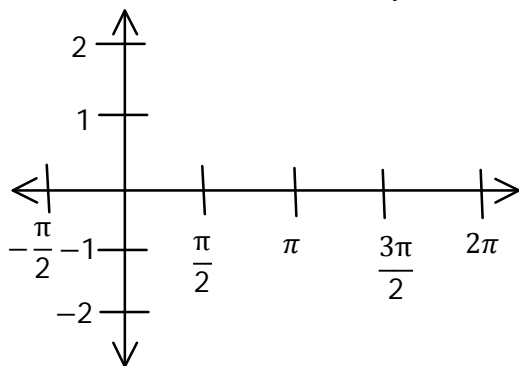
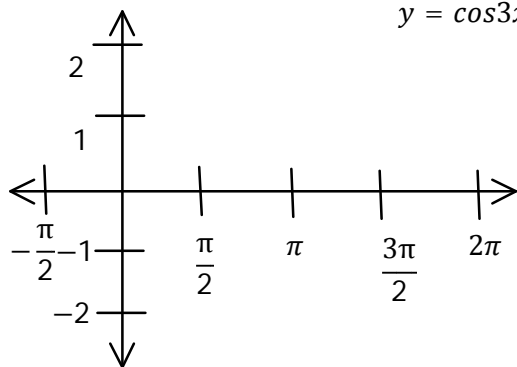$y = \sin\left(\dfrac{1}{2\pi}\right)x$

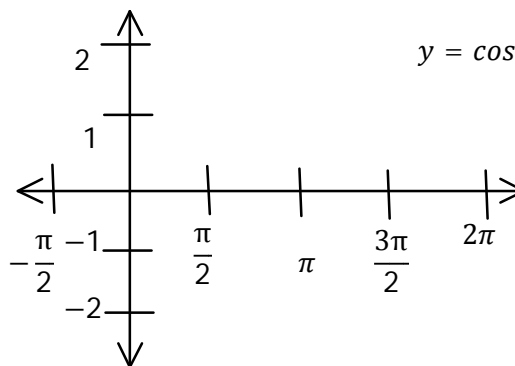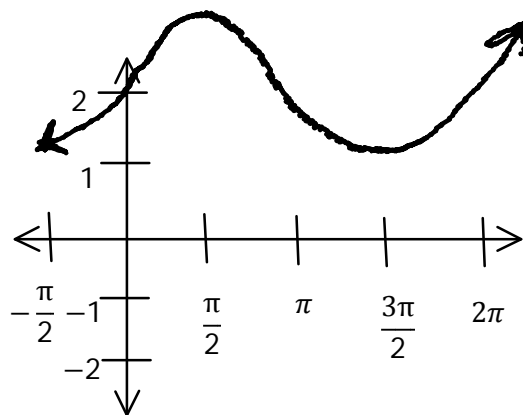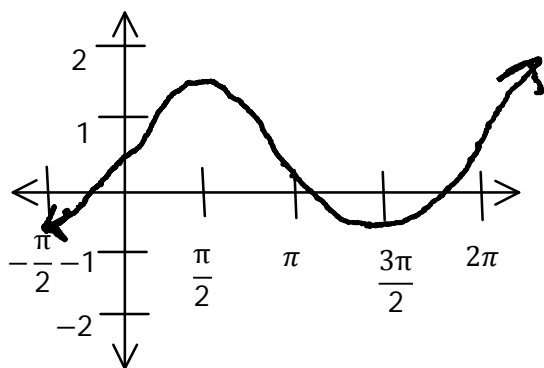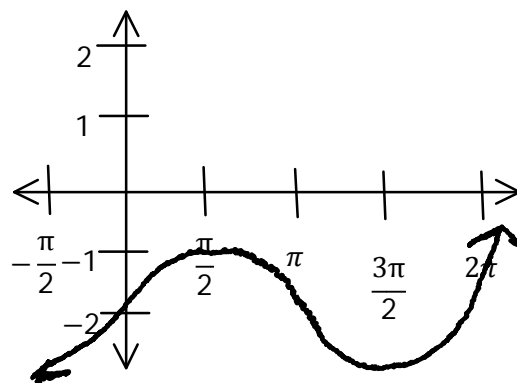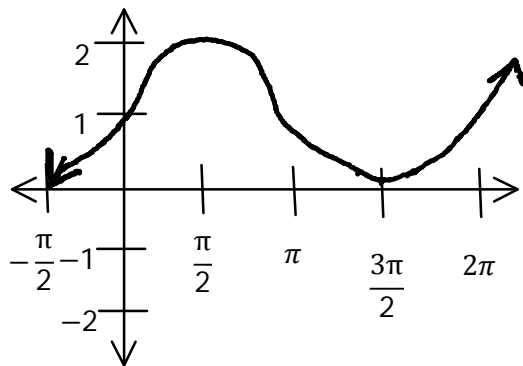**Determine b, and graph the equation $y = cosbx$**

$y = \cos2x$

$y = \cos\left(\dfrac{1}{2}\right)x$

$y = \cos3x$
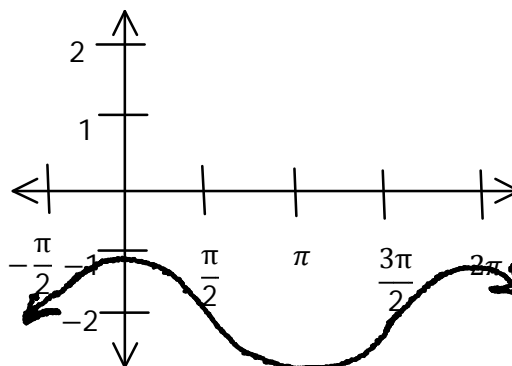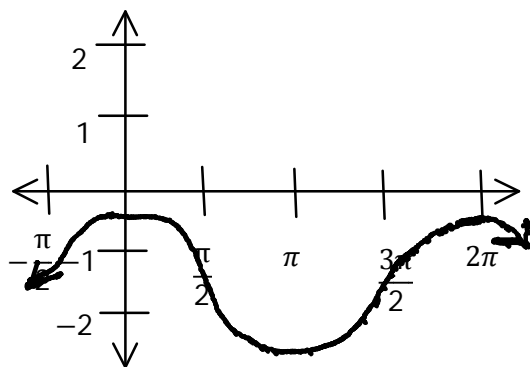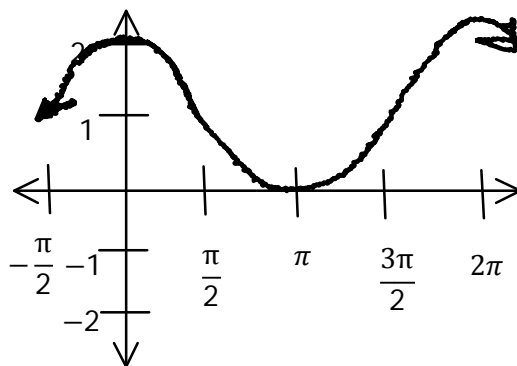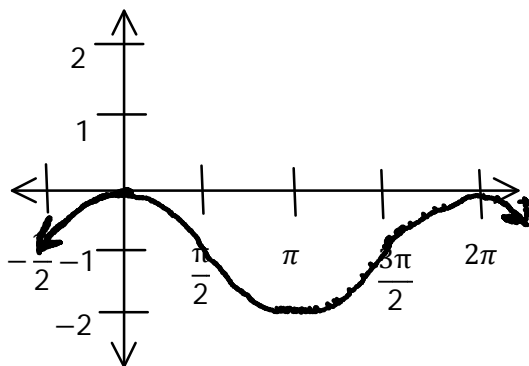
$y = \cos\left(\dfrac{1}{2\pi}\right)x$

C12 - 5.3 - "d" Find Equation WS

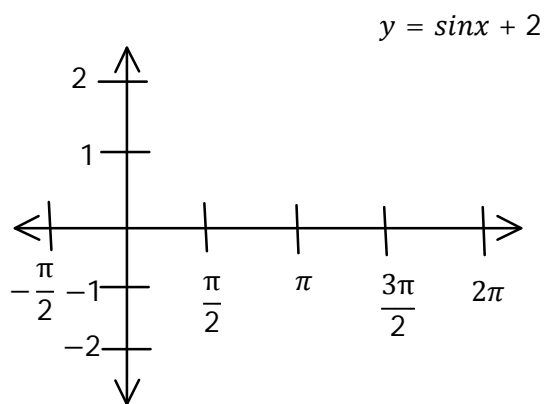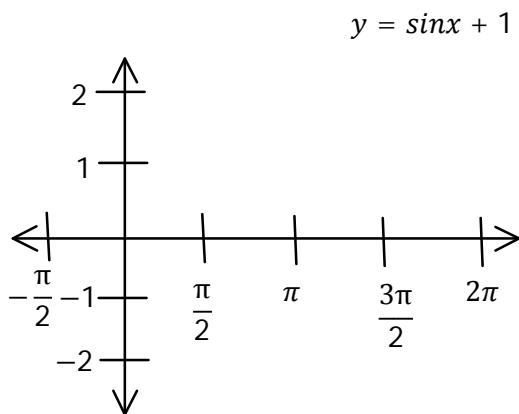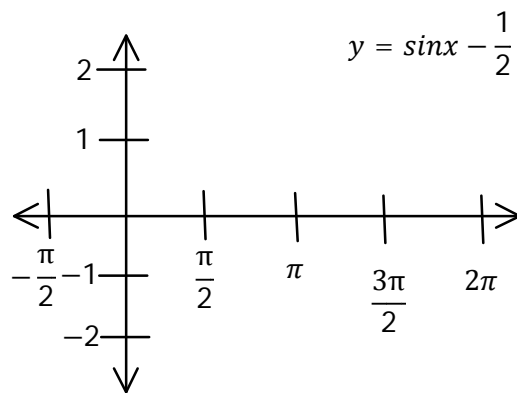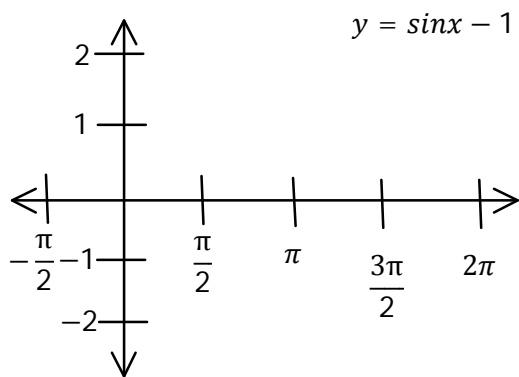**Determine b, and the equation** $y = sinx + d$

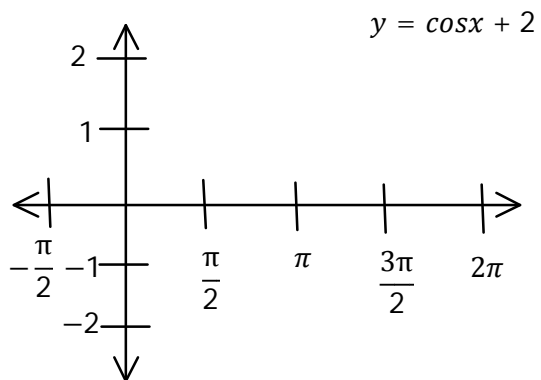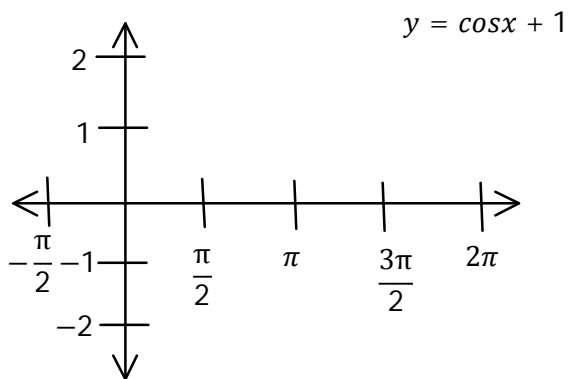

Determine b, and the equation $y = cosx + d$

C12 - 5.3 - "d" Graphing WS

Determine b, and graph the equation $y = sinx + d$

$y = sinx - 1$

$y = sinx - \dfrac{1}{2}$

$y = sinx + 1$

$y = sinx + 2$

Determine b, and graph the equation $y = cosx + d$

$y = cosx - 1$

$y = cosx - \dfrac{1}{2}$

$y = cosx + 1$

$y = cosx + 2$

C12 - 5.3 - "c" Find Equation WS

Determine c, and graph the equation $y = \boldsymbol{sin}(x \pm \boldsymbol{c})$

$y = sin2x$

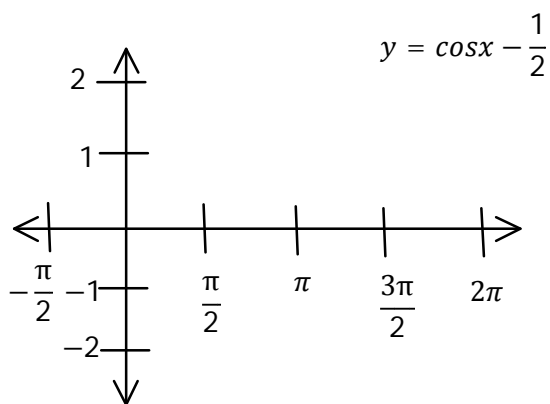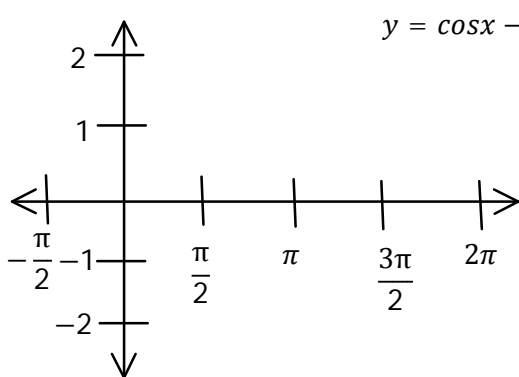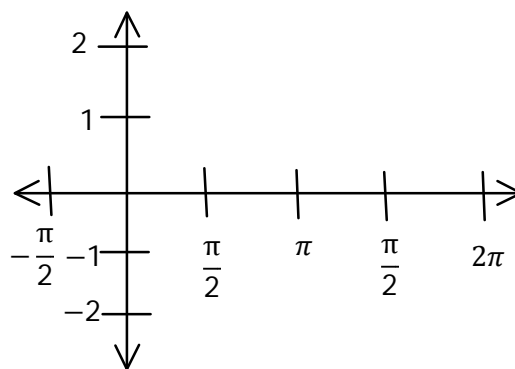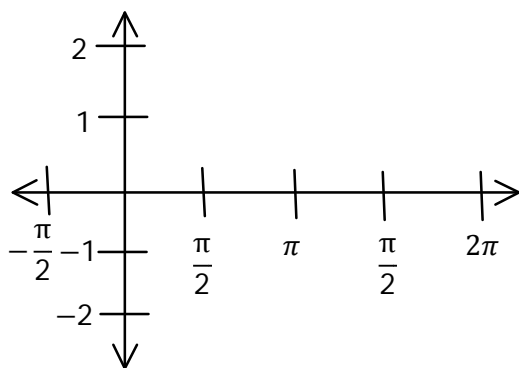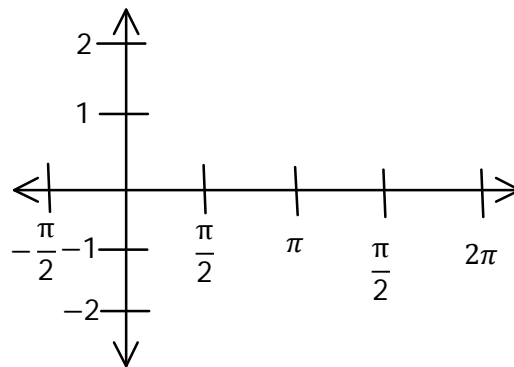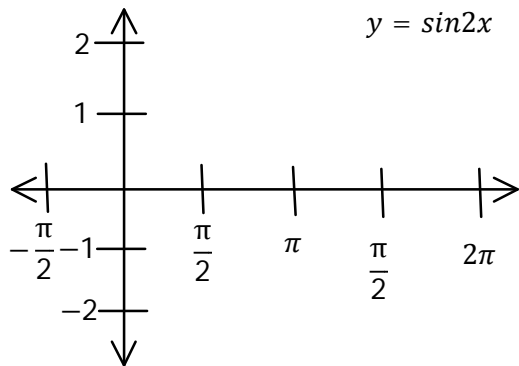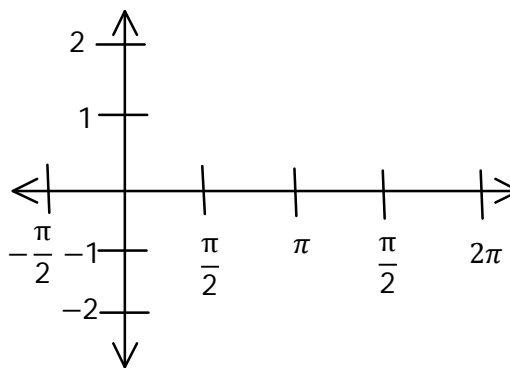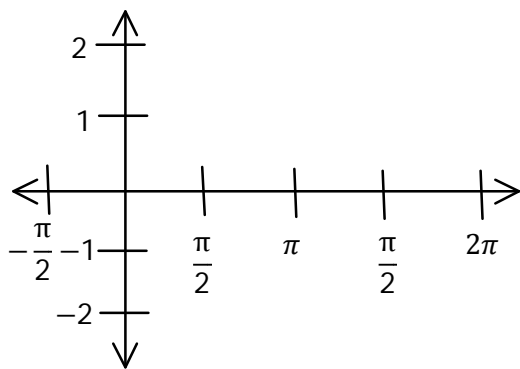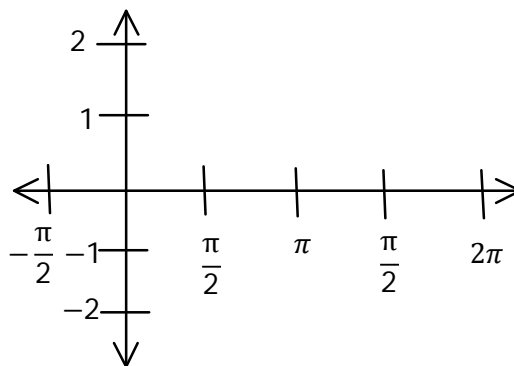**Determine b, and graph the equation $y = \boldsymbol{cos}(x \pm \boldsymbol{c})$**
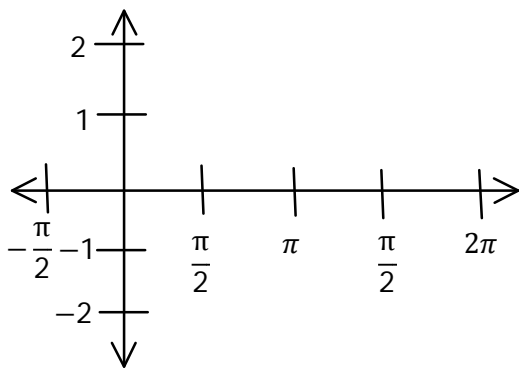
C12 - 5.3 - "c" Graphing WS

Determine c, and the equation $y = sin(x - c)$

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

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

$y = sin(x - \pi)$

$y = sin(x - \frac{3\pi}{2})$

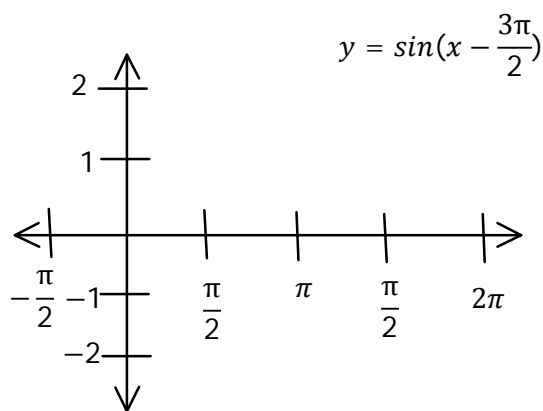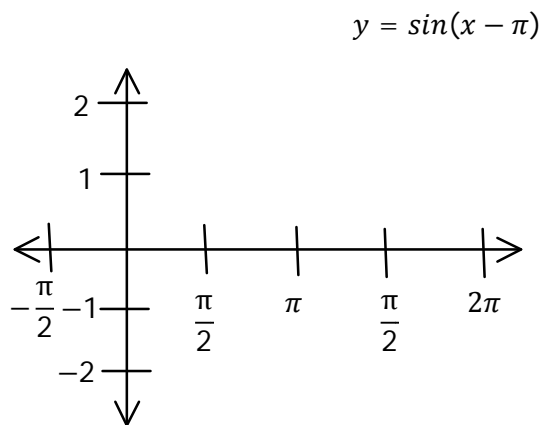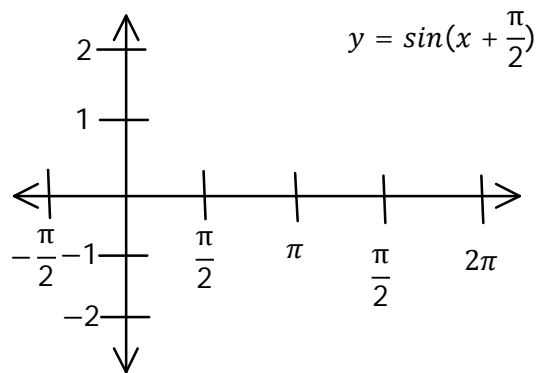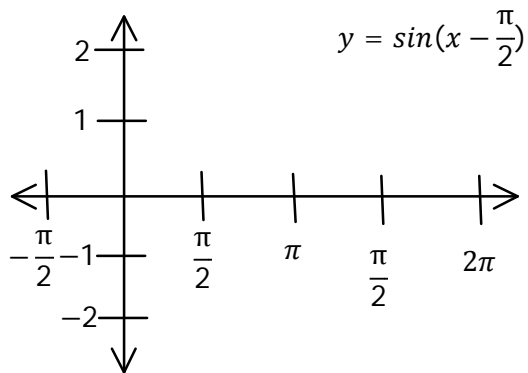**Determine c, and the equation** $y = cos(x - c)$

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

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

$y = cos(x - \pi)$

$y = sin(x - \frac{3\pi}{2})$
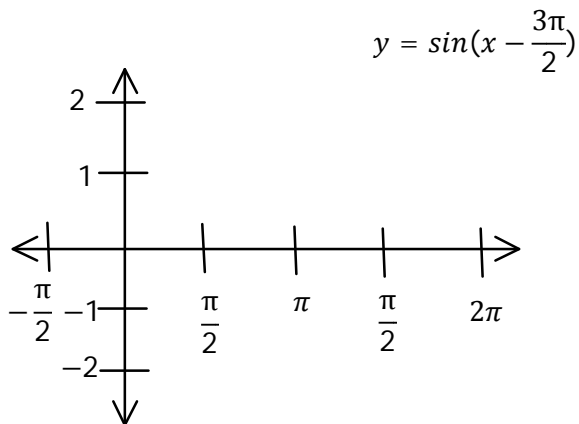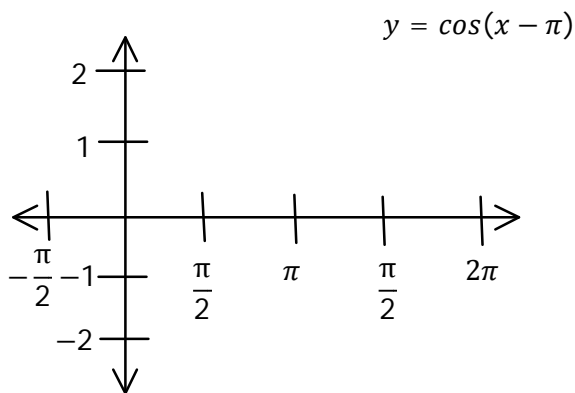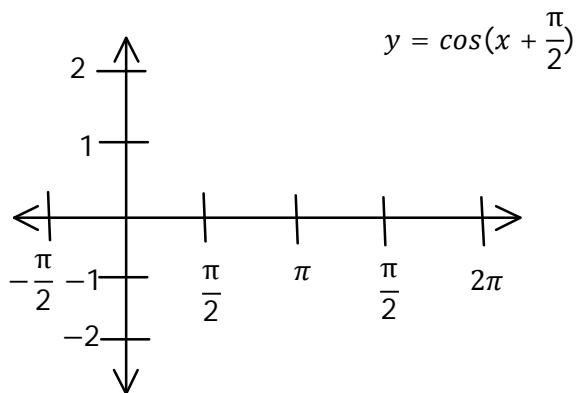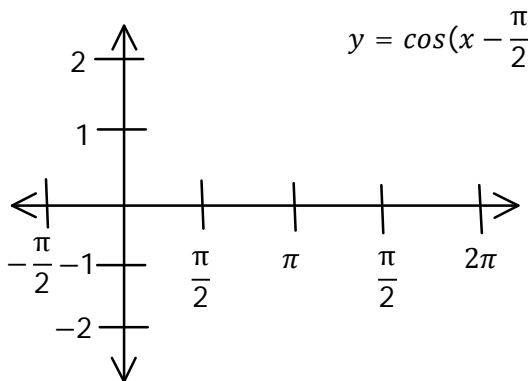
C12 - 5.3 - Graph Homework

$y = 3\sin(2x) + 1$

$y = 3\sin\left(x + \dfrac{\pi}{3}\right) - 2$

$y = 3\cos(x - \pi) + 1$

$y = 3\cos\left(\dfrac{1}{2}(x - \dfrac{\pi}{2})\right) + 1$

C12 - 5.4 - Ferris Wheel WS

A Ferris wheel with radius 12 m is 2 m off the ground. It takes 20 seconds for one complete revolution. Draw a diagram of the Ferris wheel, graph the height of a passenger starting at the bottom with a table of values and write the equation. How high at 6 second in. How long above 18m in one cycle.