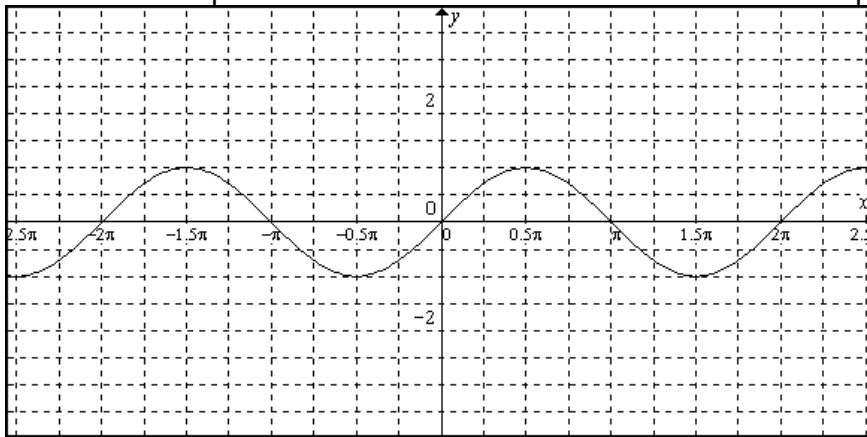


use $\pi = 180^\circ$

Sine and Cosine Curves

Name: _____

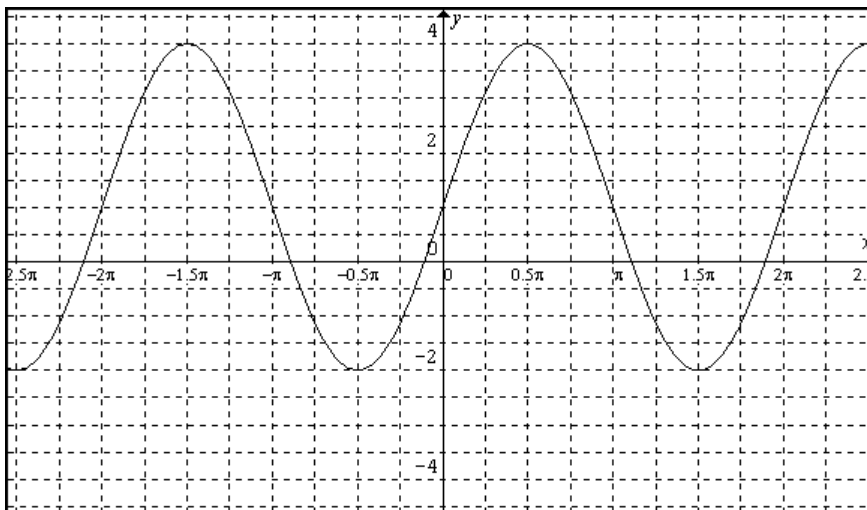
1. Make an equation as a sine curve and make a second equation as a cosine curve.



Sine: _____

Cosine: _____

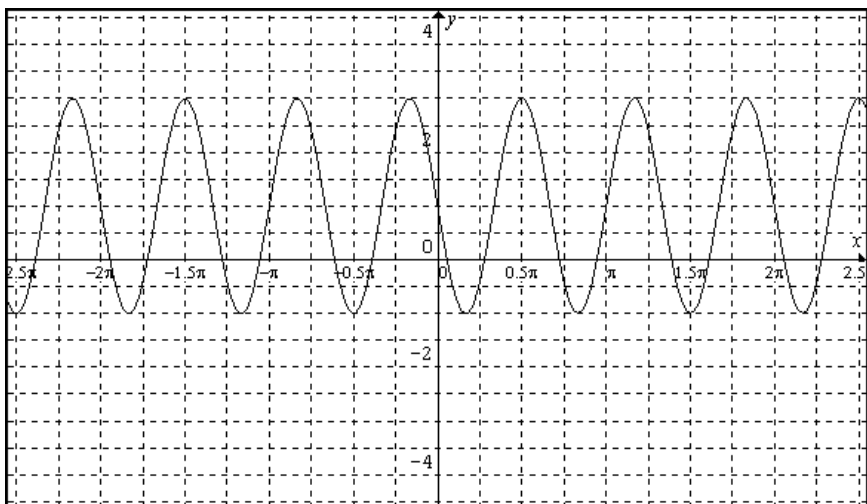
2



Sine: _____

Cosine: _____

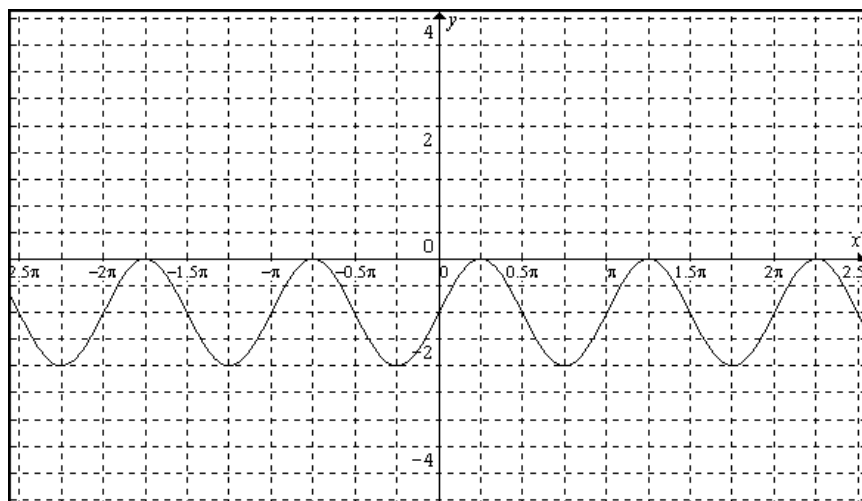
3



Sine: _____

Cosine: _____

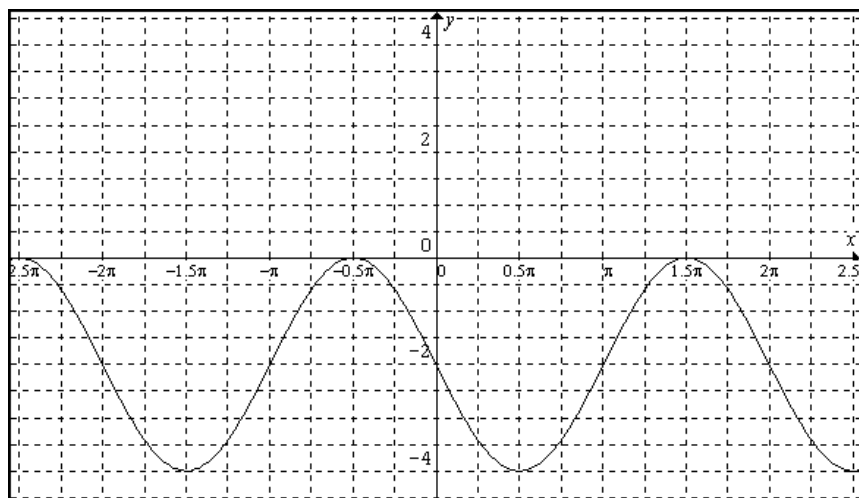
4



Sine: _____

Cosine: _____

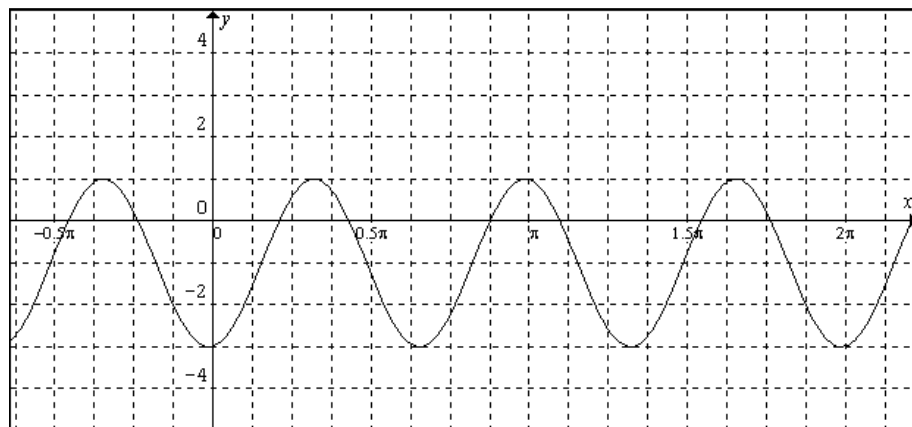
5



Sine: _____

Cosine: _____

6



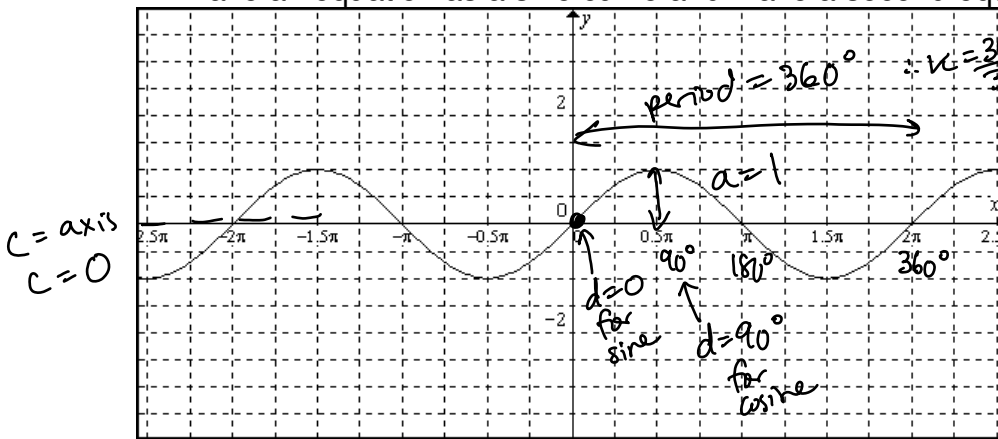
Sine: _____

Cosine: _____

Sine and Cosine Curves

Name: ANSWERS

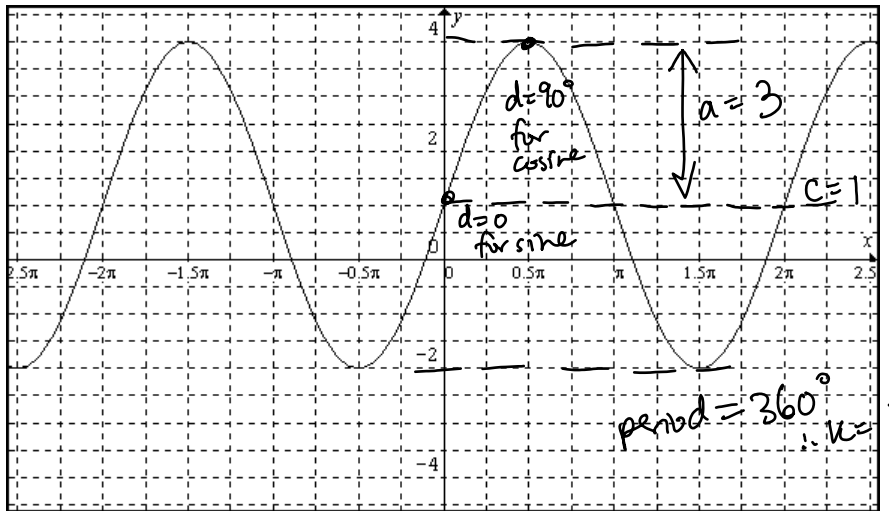
1. Make an equation as a sine curve and make a second equation as a cosine curve.



Sine: $y = \sin x$

Cosine: $y = \cos(x - 90^\circ)$
 MANY other answers possible
 $y = -\sin(x + 180^\circ)$
 $y = -\cos(x + 90^\circ)$ etc...

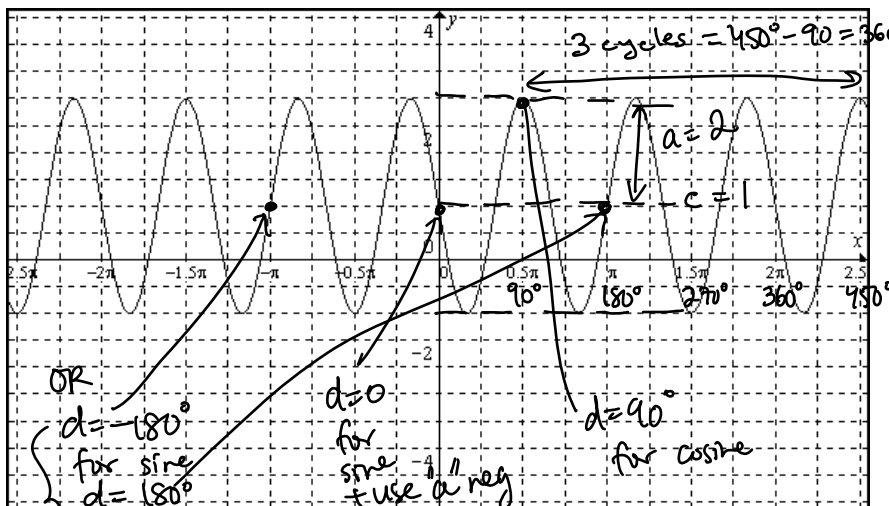
2



Sine: $y = 3 \sin x + 1$

Cosine: $y = 3 \cos(x - 90^\circ) + 1$

3

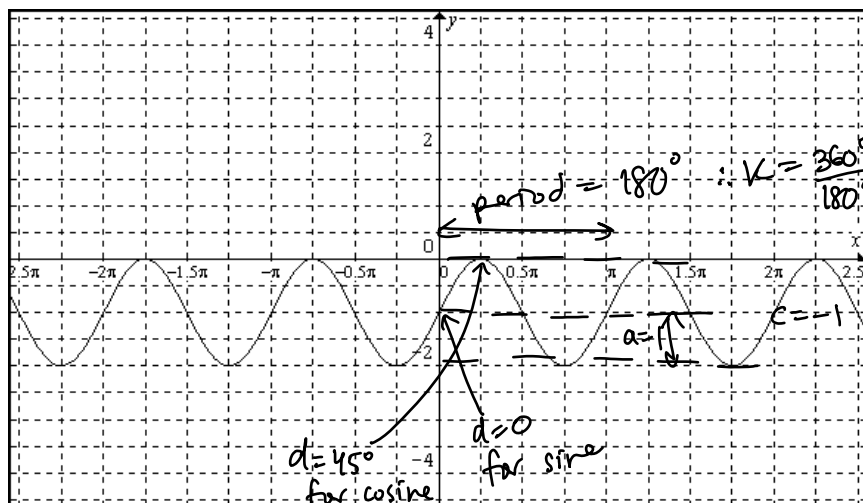


Sine: $y = -2 \sin 3x + 1$
 OR $y = 2 \sin 3(x \pm 180^\circ) + 1$

Cosine: $y = 2 \cos 3(x - 90^\circ) + 1$

with positive "a" for sine

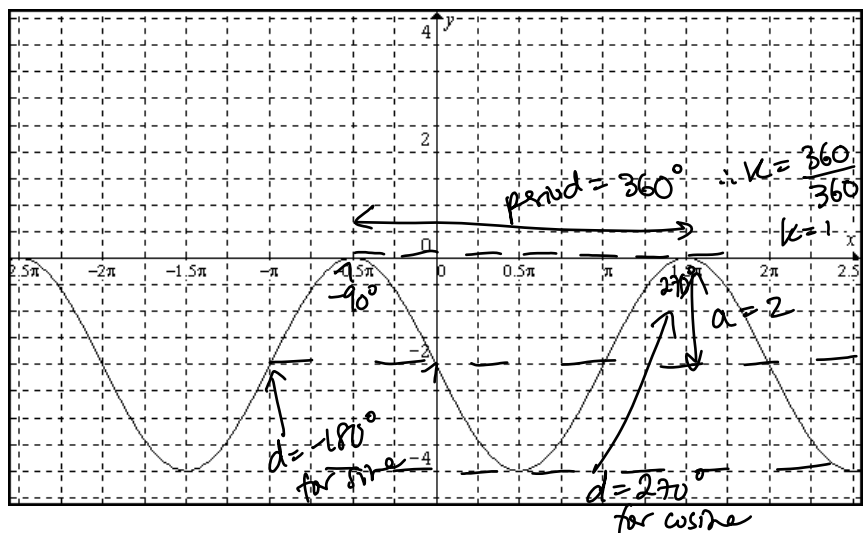
4



Sine: $y = \sin 2x - 1$

Cosine: $y = \cos 2(x - 45^\circ) - 1$

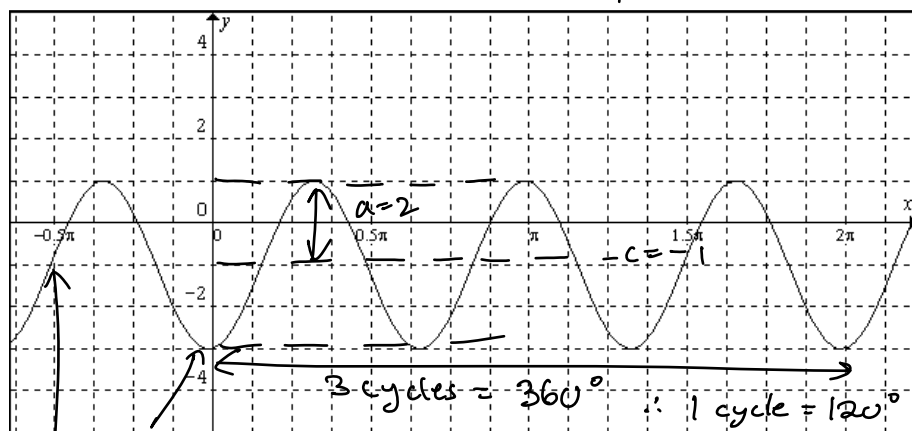
5



Sine: $y = 2 \sin(x + 180^\circ) - 2$

Cosine: $y = 2 \cos(x - 270^\circ) - 2$

6



Sine: $y = 2 \sin 3(x + 90^\circ) - 1$

Cosine: $y = -2 \cos 3x - 1$

$d = 0$ for cosine with neg "a"
 $d = -90^\circ$ for sine

$\therefore k = \frac{360}{120} = 3$