

Sine and Cosine Curves

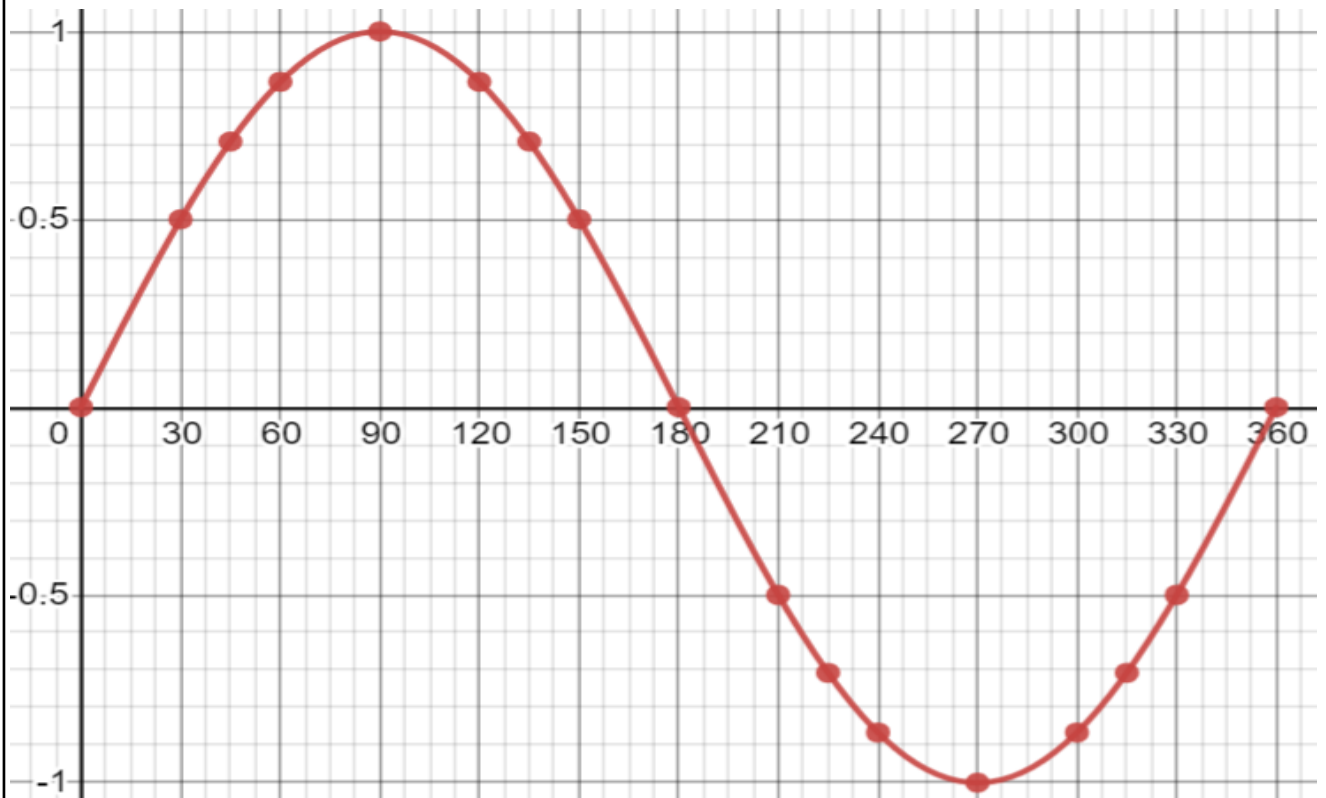
Name: _____

Date: _____

1. Fill in the table below.

θ	0°	30°	45°	60°	90°	120°	135°	150°	180°
$\sin \theta$	0	0.5	0.707	0.866	1.0	0.866	0.707	0.5	0

210°	225°	240°	270°	300°	315°	330°	360°
-0.5	-0.707	-0.866	-1.0	-0.866	-0.707	-0.5	0

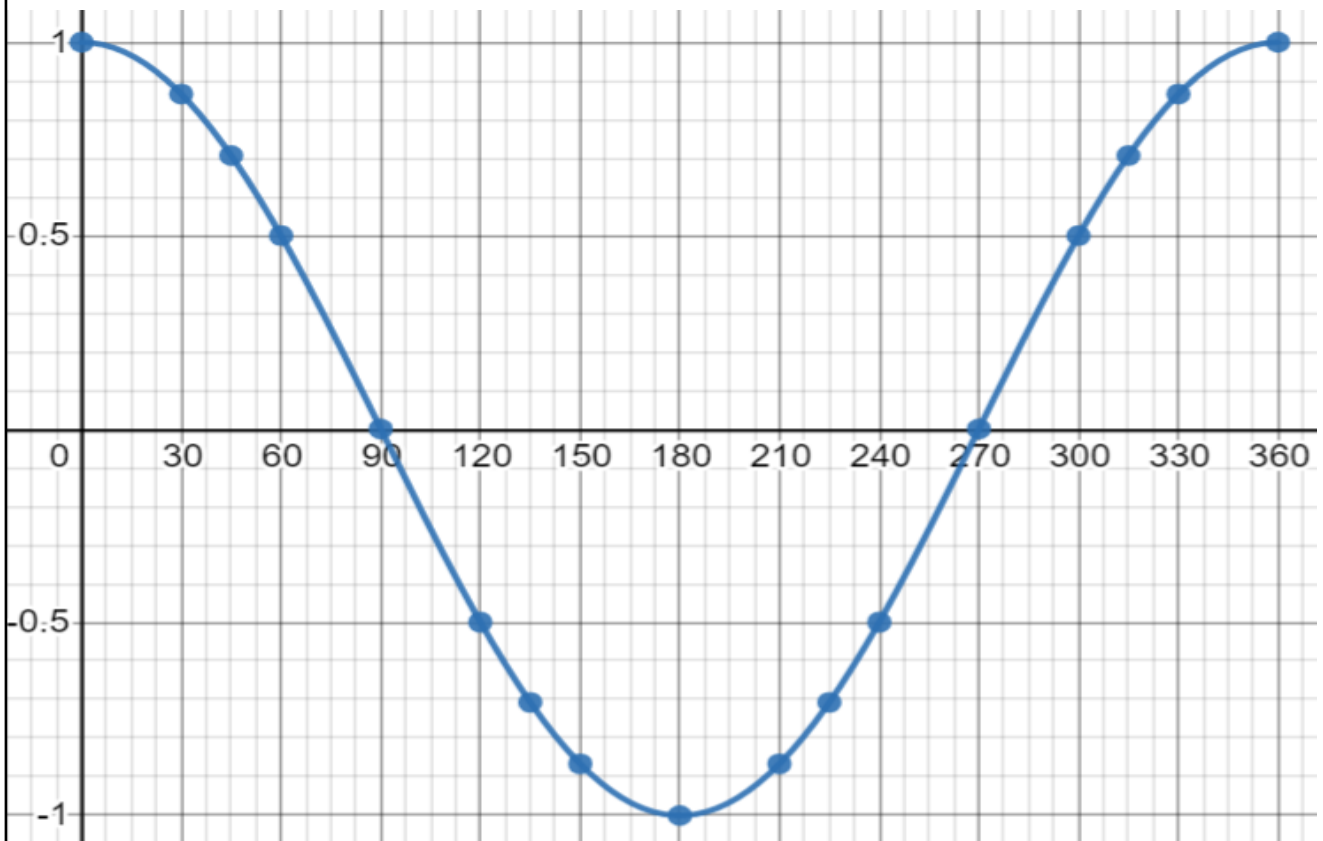


$y = \sin \theta$	
Maximum	1
Minimum	-1
Axis of Curve	$y = 0$
Amplitude	1
Period	360°
x-intercept(s)	0, 180, 360 (180n)
y-intercept	0

2. Fill in the table below.

θ	0°	30°	45°	60°	90°	120°	135°	150°	180°
$\cos \theta$	1.0	0.866	0.707	0.5	0	-0.5	-0.707	-0.866	-1

210°	225°	240°	270°	300°	315°	330°	360°
-0.866	-0.707	-0.5	0	0.5	0.707	0.866	1.0

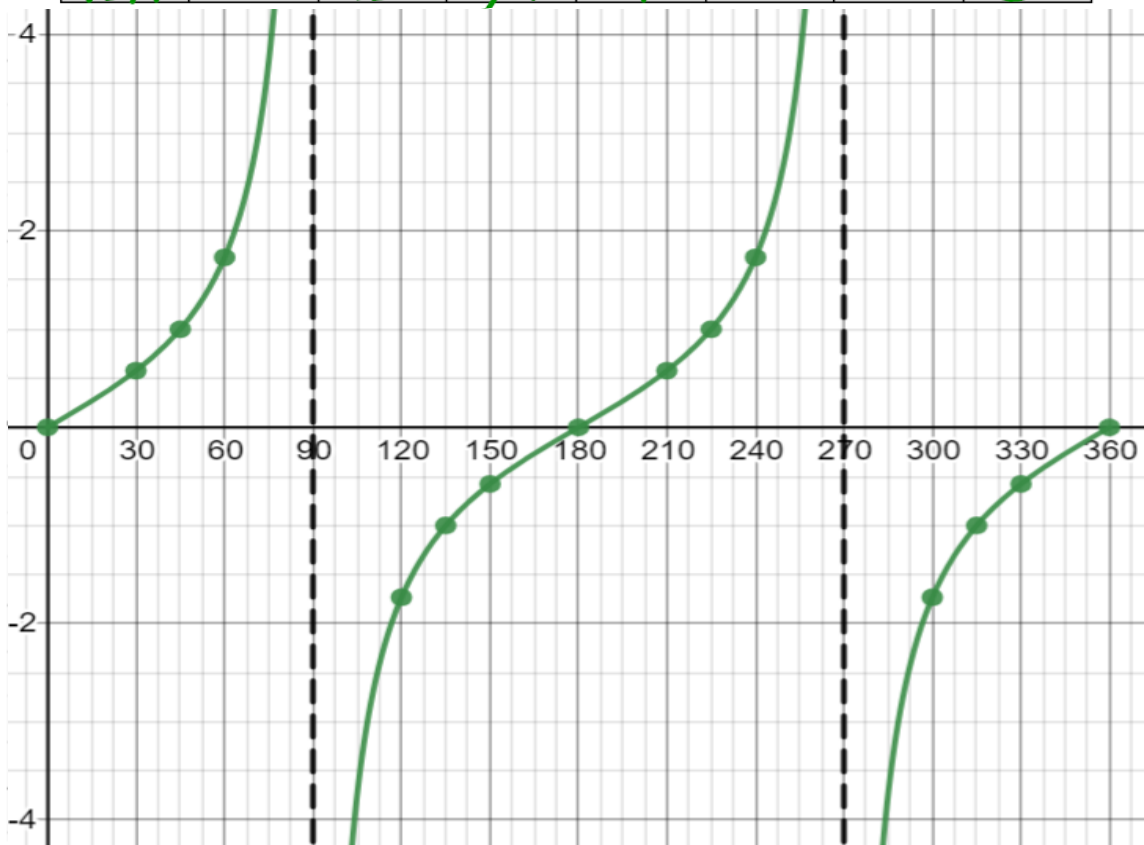


$y = \cos \theta$	
Maximum	1
Minimum	-1
Axis of Curve	$y = 0$
Amplitude	1
Period	360°
x-intercept(s)	$90, 270 (90 + 180n)$
y-intercept	1

3. Fill in the table below.

θ	0°	30°	45°	60°	90°	120°	135°	150°	180°
$\sin \theta$	0	0.5	0.707	0.866	1	0.866	0.707	0.5	0
$\cos \theta$	1	0.866	0.707	0.5	0	-0.5	-0.707	-0.866	-1
$\tan \theta$	0	0.577	1	1.732	N/A	-1.732	-1	-0.577	0

210°	225°	240°	270°	300°	315°	330°	360°
-0.5	-0.707	-0.866	-1	-0.866	-0.707	-0.5	0
-0.866	-0.707	-0.5	0	0.5	0.707	0.866	1
0.577	1	1.732	N/A	-1.732	-1	-0.577	0



$y = \tan \theta$	
Maximum	NONE
Minimum	NONE
Axis of Curve	$y = 0$
Amplitude	NONE
Period	180°
x-intercept(s)	0, 180, 360 ($180n$)
y-intercept	0
Asymptote(s)	$x = 90, x = 270$ ($x = 90 + 180n$)