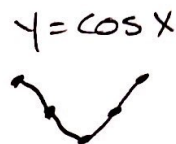


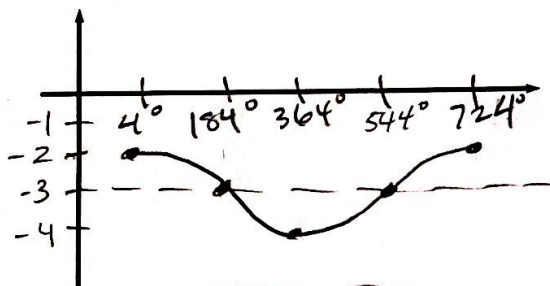
Warmup Graphing Sin/Cos 4

Warmup - Graphing Sin/Cos #4

(Make appropriate tick marks on the x- and y-axis, mark all critical points and provide the following information.)



1. Graph: $f(x) = \left(\cos\left(\frac{\theta}{2} - 2\right) - 3\right)$



domain: $[4, 724]$

period: $\frac{360^\circ}{b} = \frac{360^\circ}{1/2} = 360^\circ \cdot (2) = 720^\circ$

phase shift: 4°

vertical shift: -3

amplitude: 1

range: $[-4, -2]$

$[-1-3, 1-3]$

Domain ← Phase shift

$[b\theta - c = 0; b\theta - c = 360^\circ]$

$\frac{\theta}{2} - 2 = 0^\circ \quad \frac{\theta}{2} - 2 = 360^\circ$

$\frac{\theta}{2} = 2 \quad \frac{\theta}{2} = 362^\circ$

$\theta = 4^\circ \quad \theta = 724^\circ$

* 5 tick marks

$\frac{724 + 4}{2} = 364^\circ$

$\frac{4 + 364}{2} = 184^\circ$

$\frac{364 + 724}{2} = 544^\circ$