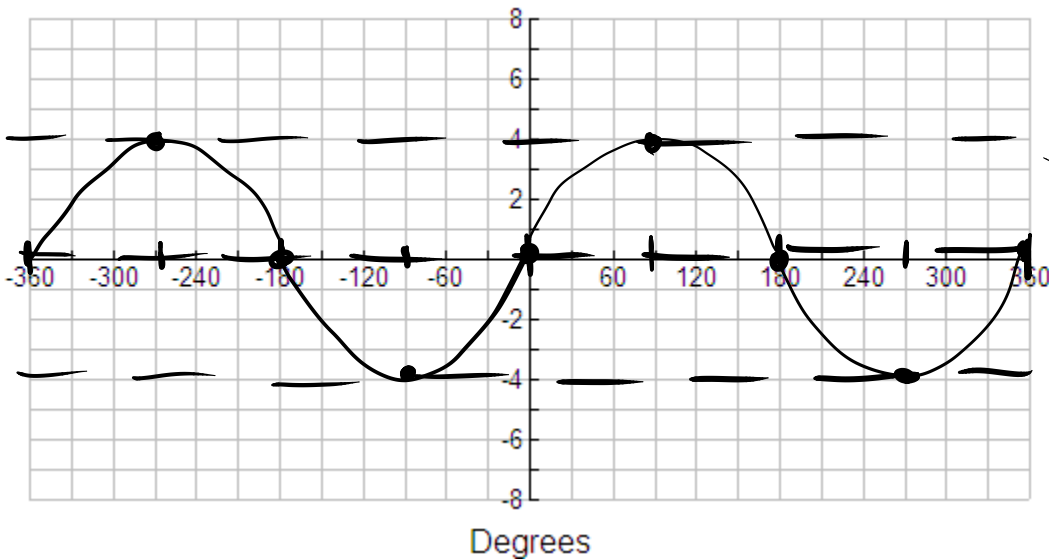


Algebra 2 – Day 1 – Degrees Vertical Transformations
 14.1 and 14.2 Graphing trigonometric functions

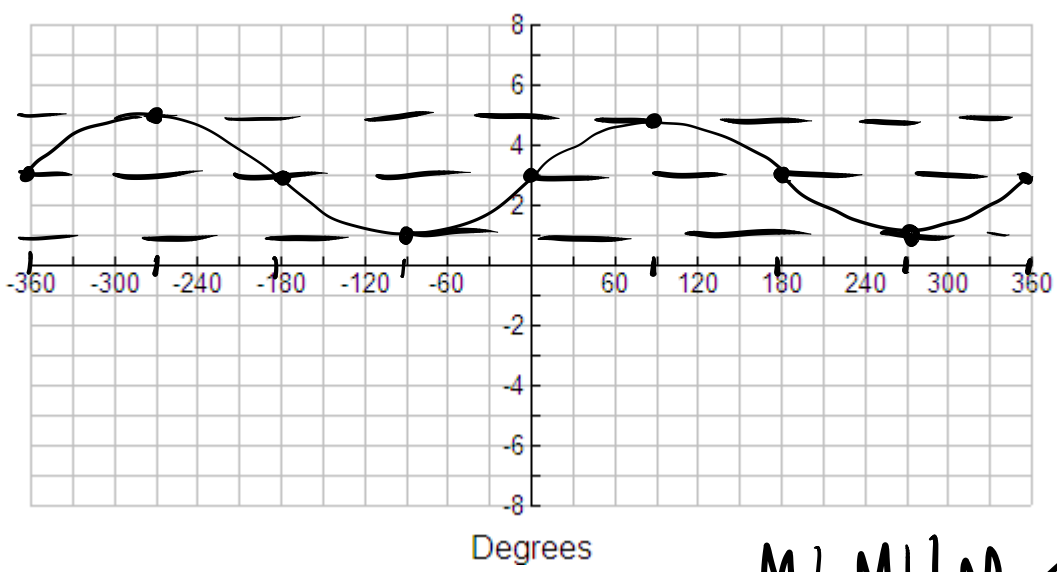
Name: Key

1. Graph two periods of: $y = 4\sin\theta$ **MHMLM**



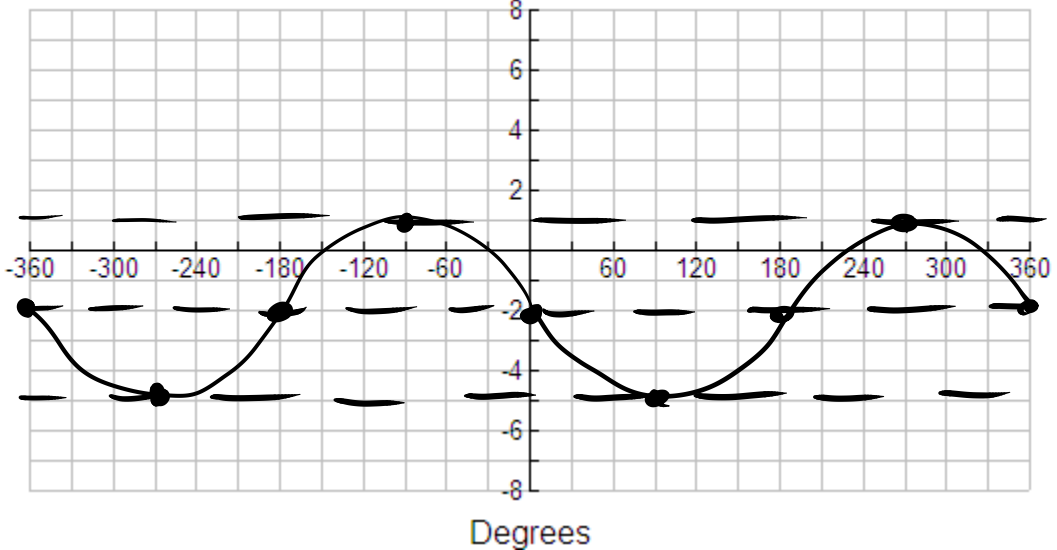
Amplitude: 4
 (up/down) Sinusoidal axis: 0
 midline
 Period: 0 → 360
 Phase shift: 0
 (right/left)

2. Graph two periods of: $y = 2\sin\theta + 3$ **MHMLM**



Amplitude: 2
 Sinusoidal axis: 3
 midline
 Period: 0 → 360
 Phase shift: 0

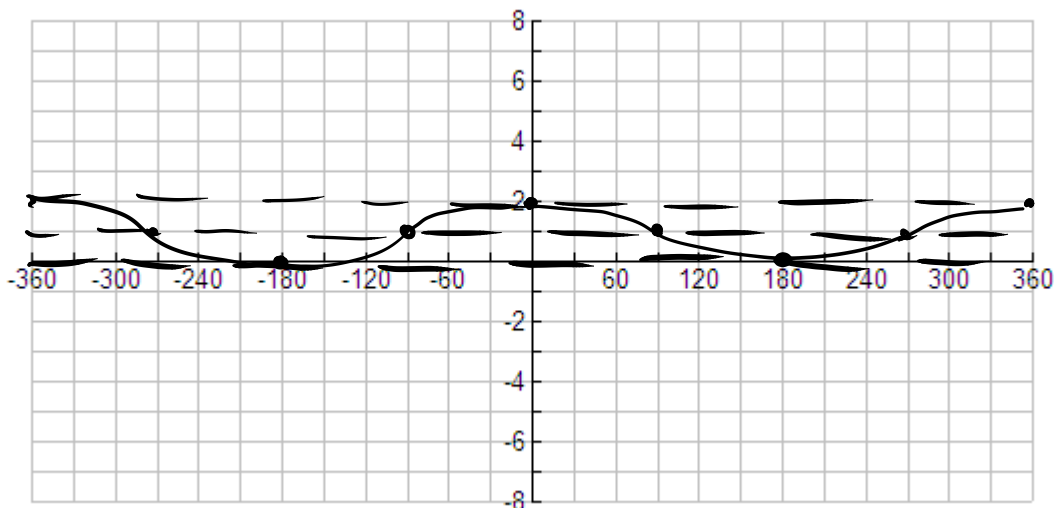
3. Graph two periods of: $y = -3\sin\theta - 2$ **M≡M≡M**



M≡M≡M ← flip!
 Amplitude: -3
 Sinusoidal axis: -2
 midline
 Period: 0 → 360
 Phase shift: 0

4. Graph two periods of: $y = \cos\theta + 1$

HMLMH



Degrees

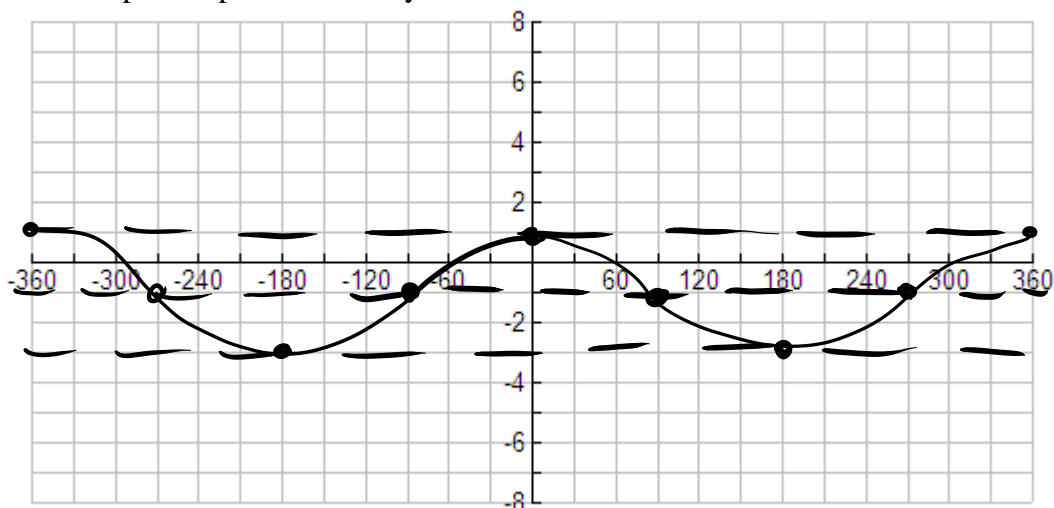
Amplitude: 1

Sinusoidal axis: 1

Period: $0 \rightarrow 360^\circ$

Phase shift: 0

5. Graph two periods of: $y = 2\cos\theta - 1$



Degrees

Amplitude: 2

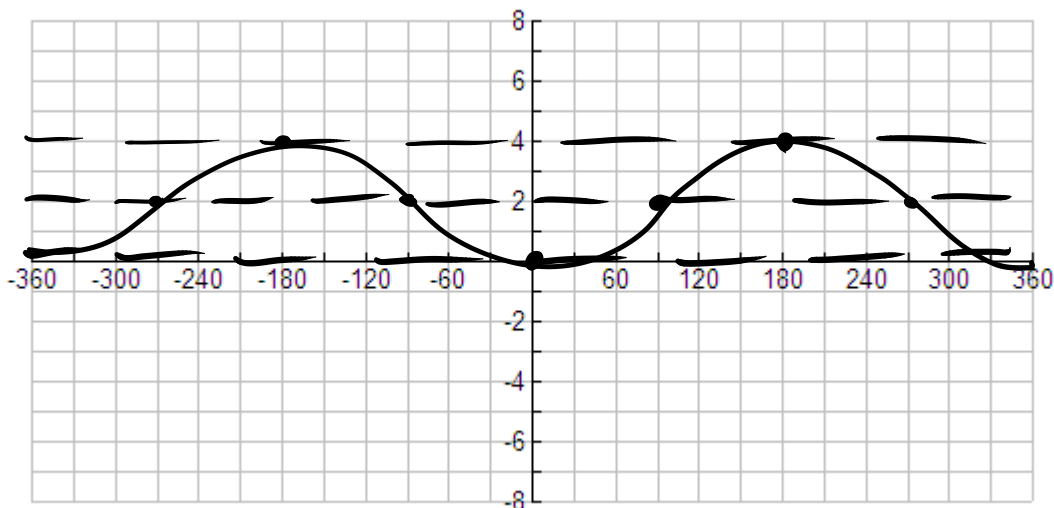
Sinusoidal axis: -1

Period: $0 \rightarrow 360^\circ$

Phase shift: 0

6. Graph two periods of: $y = -2\cos\theta + 2$

L M H M L ~~A~~ \rightarrow Flip!
 \downarrow
 -2



Degrees

Amplitude: -2

Sinusoidal axis: 2

Period: $0 \rightarrow 360^\circ$

Phase shift: 0