

Algebra 2 Weeds. 1-30-13 CLASS NOTES

WS Practice

$$(37) \quad y = \frac{1}{7} \sin\left(\frac{\theta}{7} - 90\right) + 3$$

$$\text{Amp} = \left|\frac{1}{7}\right|$$

$$\text{per.} = 2\pi \cdot 7 = 14\pi$$

$$\text{h.s.} = 90^\circ \rightarrow$$

$$\text{v.s.} = 3$$

$$a = \left|\frac{1}{7}\right|$$

$$b = \left|\frac{1}{7}\right| = \frac{360}{7}$$

$$h = 90^\circ$$

$$k = 3$$

$$(40) \quad y = \frac{1}{2} \sin(3\theta + 210) - 3$$

$$\text{amp} = \left|\frac{1}{2}\right|$$

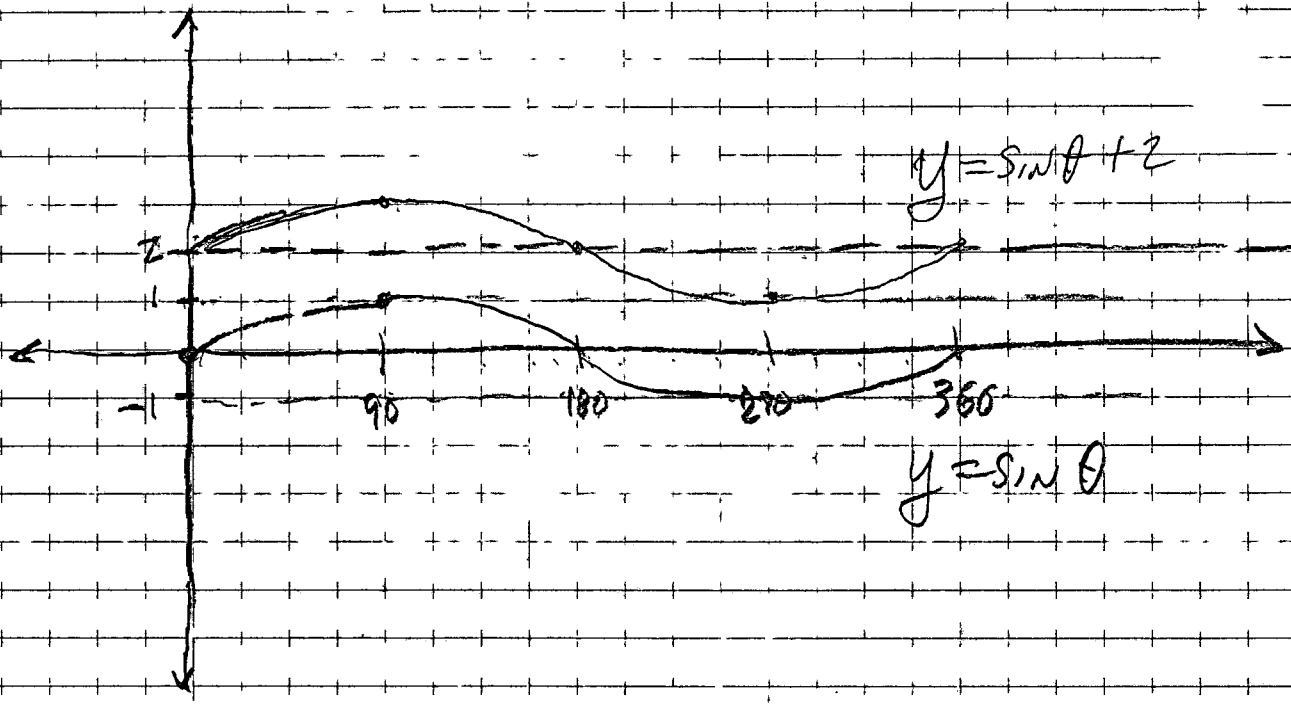
$$\text{per.} = 120^\circ$$

$$\text{h.s.} = 210^\circ \rightarrow$$

$$\text{v.s.} = 3 \downarrow$$

(32) $y = \sin \theta + 2$

Ch: 11-3



37

WolframAlpha™ computational knowledge engine

Plot $y = (1/7) \sin((1/7)x - 90) + 3$, $0 < x < 6000$ Degrees



Examples Random

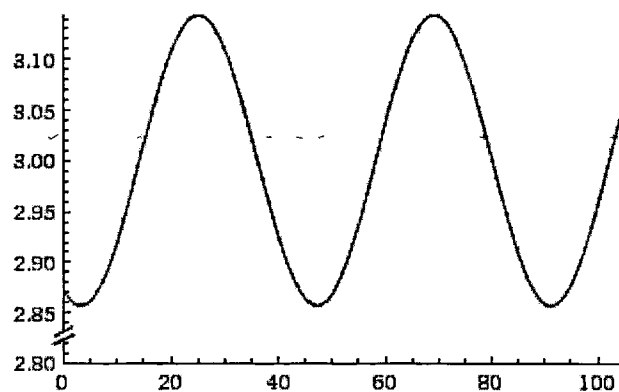
Input interpretation:

plot

$$\frac{1}{7} \sin\left(\frac{1}{7}x - 90\right) + 3$$

$x = 0$ to 6000°

Plot:



X AXIS IS IN RADIANS

Enable interactivity

Computed by Wolfram Mathematica

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$$6000 \text{ deg} \cdot \frac{\pi \text{ rad}}{180 \text{ deg}} \approx 104.7 \text{ radians}$$