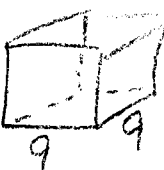


BE-Alg. 2 | WEDNESDAY 2-17-10

① What is the surface area of
A 9inch cube?

② Find the circumference and area
of a circle with radius = 12m.
(EXACT answers)

①  Each face $\Rightarrow 9 \cdot 9 = 81 \text{ in}^2$
 $\times 6 \text{ faces}$
 $\boxed{486 \text{ in}^2}$

② $C = 2\pi r = 2\pi(12) = \boxed{24\pi \text{ m}}$

$$A = \pi r^2 = \pi(12)^2 = \boxed{144\pi \text{ m}^2}$$

Alg. 2 Homework Review: Pg 774 #12, 15

⑫ $y = 3 \sin [2(\theta - 30^\circ)] + 10$

Annotations:

- Amp. (Amplitude) points to 3
- Period points to 2: $\text{Period} = \frac{360^\circ}{2} = 180^\circ$
- horizontal SHIFT (PHASE SHIFT) points to -30° (indicated by a right arrow)
- VERTICAL SHIFT points to +10: MIDLINE $\Rightarrow y = 10$

(see ATTACHED graph)

⑮ $y = \frac{2}{3} \cos \left[\frac{1}{2} \left(\theta + \frac{\pi}{6} \right) \right] - 2$

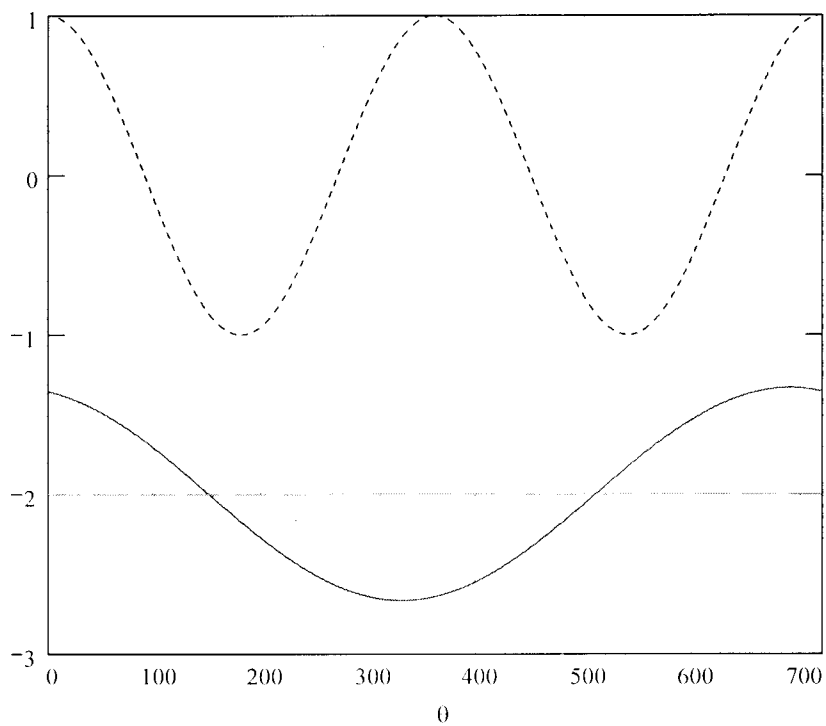
Annotations:

- Amp. (Amplitude) points to $\frac{2}{3}$
- Period points to $\frac{1}{2}$: $\text{Period} = \frac{2\pi}{\frac{1}{2}} = 4\pi$ or 720°
- horizontal SHIFT points to $+\frac{\pi}{6}$ (indicated by a left arrow, 30°)
- VERTICAL SHIFT points to -2 (indicated by a down arrow)

(see ATTACHED graph)

Page 774#15

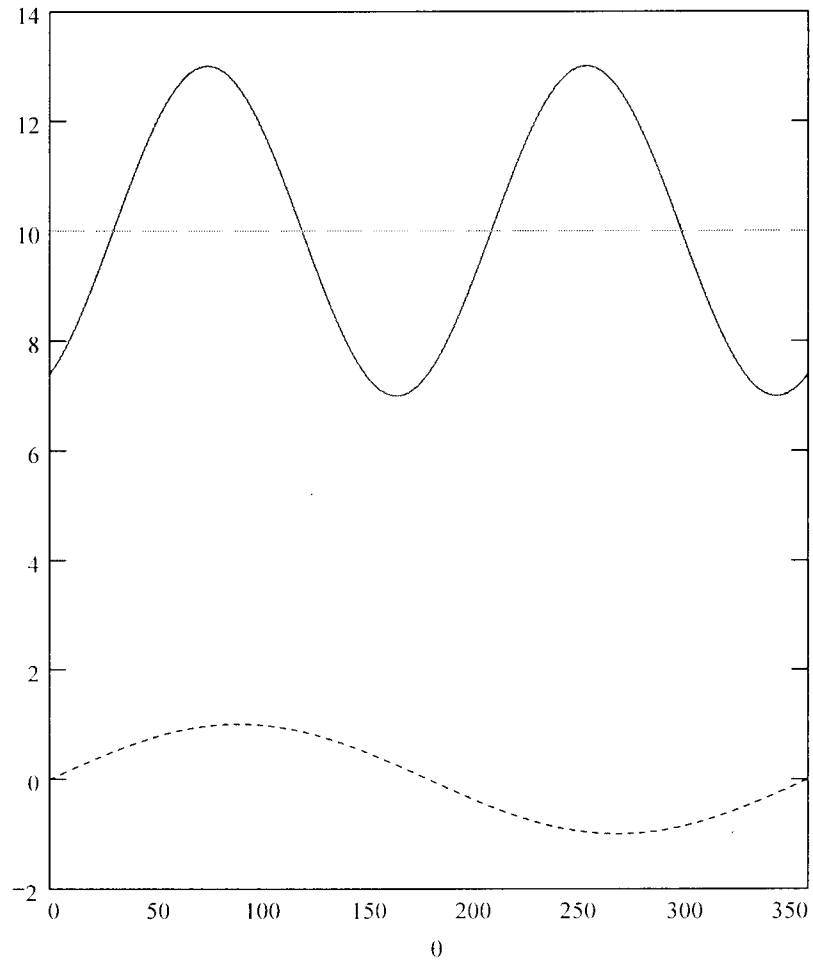
$$\frac{\left(\frac{2}{3}\right) \cdot \cos[0.5 \cdot (\theta + 30)] - 2}{\cos(\theta)}$$



$$\sin(\theta) := \sin(\theta \cdot \text{deg})$$

Page 774 #12

$$\frac{3 \cdot \sin[2 \cdot (\theta - 30)] + 10}{\sin(\theta)}$$



CLASSWORK / Practice:

Page 807

- Read Concept Summary AND Example
 - Do # 24-27.
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