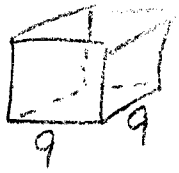
BE-Alg. 2 1

Friday 2-24-12

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

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

---

① 

9 Each face $\Rightarrow 9 \cdot 9 = 81\ in^2$

$\times$ 6 faces

$486\ in^2$

② $C = 2\pi r = 2\pi(12) = 24\pi\ m$

$A = \pi r^2 = \pi(12)^2 = 144\pi\ m^2$

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

(12) $y = 3 \sin\left[2(\theta - 30°)\right] + 10$

- Amp. → 3
- Period $= \frac{360°}{|2|} = 180°$
- horizontal shift → (phase shift)
- vertical shift ↑
- Midline $\Rightarrow y = 10$

(See attached graph)

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

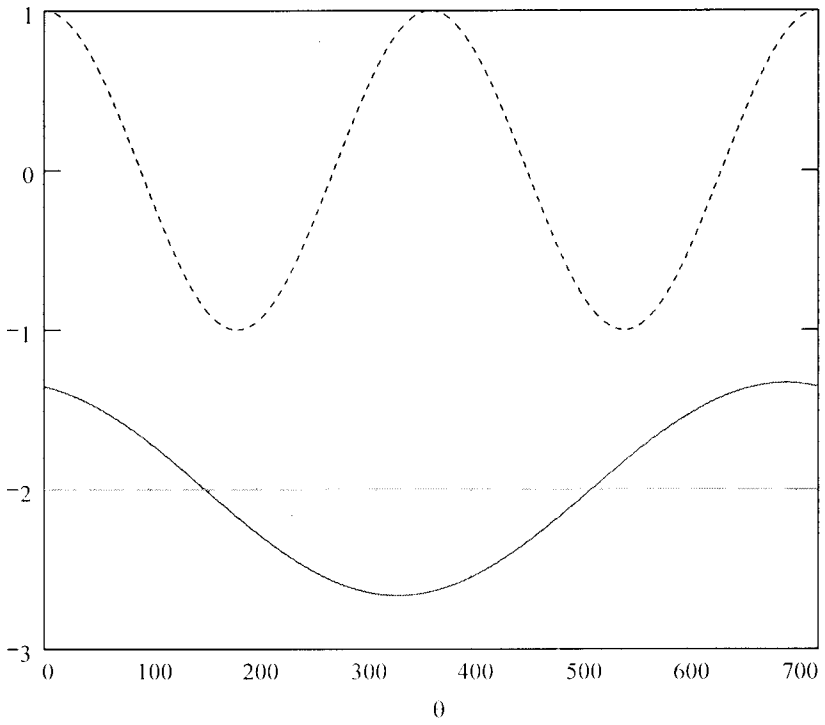
- Amp → $\frac{2}{3}$
- Period $= \frac{2\pi}{|\frac{1}{2}|} = 4\pi$ or $720°$
- horizontal shift ← $30°$
- vertical shift ↓

(See attached graph)

Page 774 #15

$$\frac{\left(\frac{2}{3}\right)\cdot\cos[0.5\cdot(0+30)]-2}{\cos(0)}$$

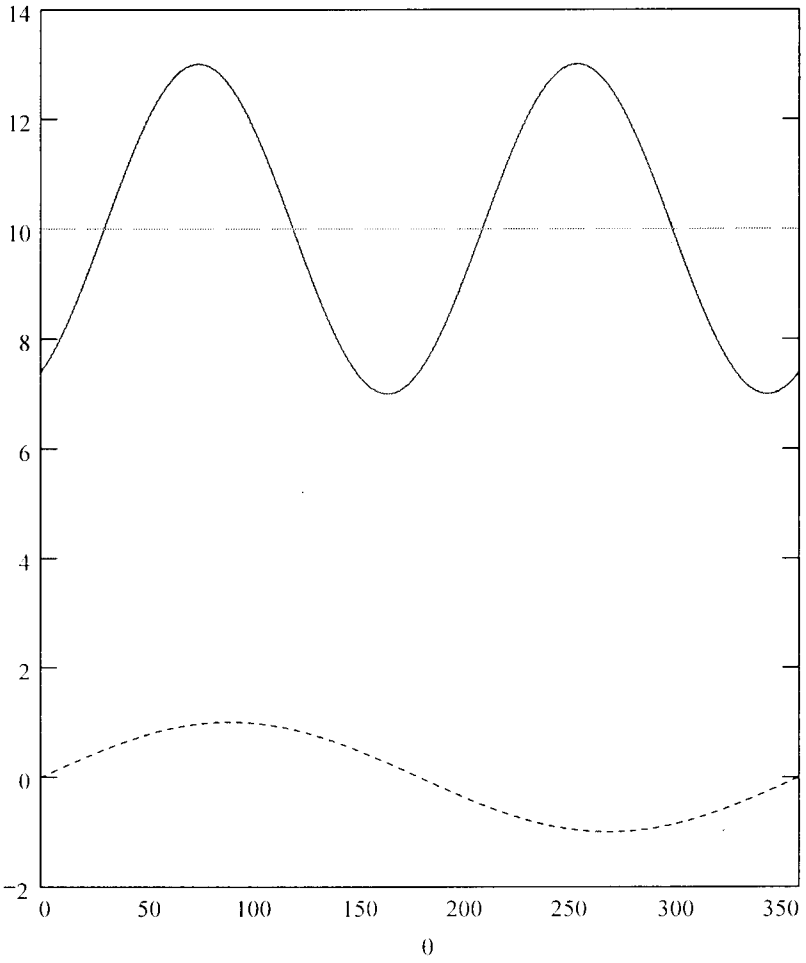
$$-2$$



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

Page 774 #12

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



Classwork

Q3 OBQ7