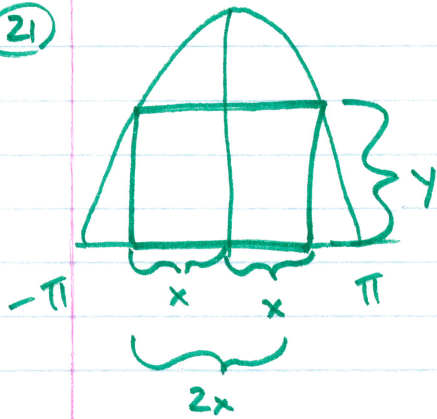


4.4

(2)



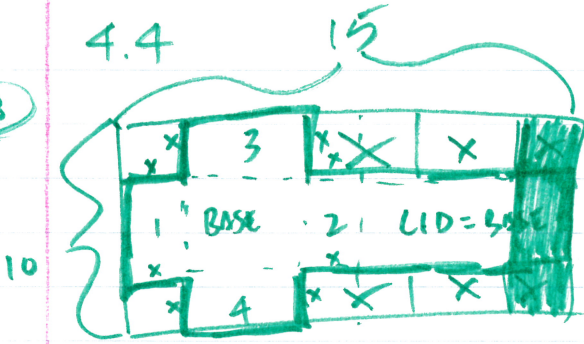
$$A = 2xy \quad y = 4\cos(.5x)$$

$$A = \underbrace{2}_{f} \underbrace{x}_{g} \cos(.5x)$$

$$A' = 2\cos(.5x) + -\sin(.5x) [.5] (2x)$$

$$3.441 \times 2.609$$

18



$$(a) V(x) = x(10-2x)(7.5-x)$$

$$(b) \begin{matrix} \uparrow & \uparrow & & \\ x > 0 & x < 5 & x < 7.5 & [0, 5] \\ & & & (0, 5) \end{matrix}$$

$$(d) V(x) = x(7.5 - 10x - 15x + 2x^2)$$

$$= 7.5x - 25x^2 + 2x^3$$

$$V'(x) = 7.5 - 50x + 6x^2 = 0$$

$$x = \cancel{1.962, 6.371} \quad 1.962, 6.371$$

INCR	DECR
+	-
1	2

1.962

$$1.962x \quad x$$