

Packet Pgs 3-4:

- 1) a) total distance traveled in feet  
b)  $20(22) + 20(35) + 20(44) = 2020$  ft.

2) a)  $T'(7) = \frac{55-62}{8-6} = -\frac{7}{2}$  deg/min

b)  $\frac{1}{8-0} \cdot \int_0^8 T(x) dx = \frac{1}{8} \int_0^8 T(x) dx$

$$\frac{1}{2} [1(100+93) + 4(93+70) + 1(70+62) + 2(62+55)] = 605.5$$

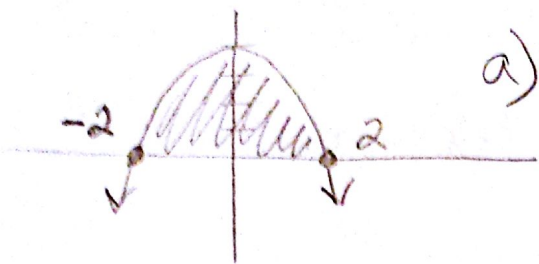
$$\frac{1}{8} (605.5) = 75.688^\circ \text{C}$$

3)  $f(x) = -100x^2 + 90x + 14$ ,  $x = 0.1$   
to  $x = 1$

$$\frac{1}{2} (.1)(22 + 2(28) + 2(32) + 2(34) + 2(34) + 2(32) + 2(28) + 2(22) + 2(14) + 4) = 23.7$$

4)  $\frac{1}{2} (1)(0 + 2(50) + 2(60) + 2(80) + 2(90) + 2(100) + 2(95) + 2(85) + 2(80) + 2(75) + 85)$   
 $\frac{757.5}{60} = 12.625$  miles

$$5) f(x) = 4 - x^2 = -x^2 + 4$$



$$a) \text{LRAM: } 1(0) + 1(3) + 1(4) + 1(3) = 10$$

$$b) \text{RRAM: } 1(0) + 1(3) + 1(4) + 1(3) = 10$$

$$c) \text{MRAM: } 1(1.75) + 1(3.75) + 1(3.75) + 1(1.75) = 11$$

$$d) \text{TAM: } \frac{1}{2}(1)(0 + 2(3) + 2(4) + 2(3) + 0) = 10$$

$$6) a) \text{LRAM: } 114 \text{ in}$$

$$b) \text{RRAM: } 116 \text{ in}$$

$$8) \frac{1}{25} [5(24) + 5(76) + 5(106) + 5(124) + 5(135)]$$

$$7) 1.6(1.5) + 1.5(2.2) + 1.1(3.1) + 1.2(4.3) = 14.27 \text{ (B)}$$

$$9) \frac{1}{2}(1)(0 + 2(6) + 2(10) + 2(16) + 2(14) + 2(12) + 2(18) + 2(22) + 2(12) + 2(4) + 2) = 115 \text{ in}$$

$$10) \frac{1}{2}(1)(4 + 2(1) + 2(0) + 2(1) + 4) = 6$$