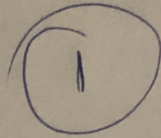


80  
01

ADETORO MAYONA SOLA

18/ENTROF COOS

Electrical / Electronics ENGINEERING.



$$V = 4t - 3t^2$$

$$S = \int v dt = \int 4t - 3t^2 dt = \frac{4t^2}{2} - \frac{3t^3}{3} + C$$

$$S(0) = 0 = \frac{4t^2}{2} - \frac{3t^3}{3} + C$$

$$C=0 \quad S = \frac{4t^2}{2} - \frac{3t^3}{3}$$

$$S = 2t^2 - t^3$$

$$S = 2(4)^2 - (4)^3$$

$$S = 2 \times 16 - 64$$

$$S = 32 - 64$$

$$S = -32m$$

$$S(4) = \underline{\underline{-32m}}$$

ADZORO MANOIA SOEA  
18/04/005

(2)

$$S(0) = -2$$

$$S(2) = -20$$

$$S(4) = 28.65m$$

$$\int a dt = \frac{4t^3}{3} - 2t + c$$

$$\int v dt = s = \frac{4t^4}{12} - t^2 + c \cdot t + D = \frac{t^4}{3} - t^2 + c \cdot t - 2$$

another constant

$$-2 = \frac{4(0)^4}{12} + 0^2 + c \cdot 0 + D$$

$$D = -2$$

$$= 28.65m$$

$$-20 = \frac{2^4}{3} - 2^2 + c \cdot 2 - 2$$

$$c = -9.67$$

$$S_{(4)} = \frac{t^4}{3} - t^2 - 9.67t - 2$$

$$S(4) = \frac{(4)^4}{3} - (4)^2 - 9.67(4) - 2$$

$$\frac{256}{3} - 16 - 38.68 - 2$$

$$S = 28.65m$$

2

ADETORO MAHONKA SOLA

18/12/2018

Elect. level.

3

$$v = 0.5t^3 - 8t$$

$$\frac{0.5t^3}{4} + \frac{8t^4}{4}$$

$$a = \frac{dv}{dt} = 1.5t^2 - 8$$

$$a(2) = 1.5(2)^2 - 8$$

$$a(2) = -2 \text{ m/s}^2$$

4

$$v = 20 - 0.05s^2$$

$$a ds = v dv$$

$$a = v \cdot \frac{dv}{ds}$$

$$\frac{dv}{ds} = -0.1s$$

$$a = (20 - 0.05s^2)(-0.1s)$$

$$a(15) = (20 - 0.05(15)^2)(-0.1(15))$$

$$a = -13.125 \text{ m/s}^2$$