

Meter	$C(m)$
0 x_0	0
1 (2) x_1	15 (25)
2 (4) x_2	25 (65)
3 x_3	30 (90)
4 x_4	45 (225)
5 x_5	20 (400)

$$S = 5, \Delta x = 1$$

Formula

$$S(n) = \frac{\Delta x}{3} \left[F(x_0) + 4F(x_1) + 2F(x_2) + \dots + 2F(x_{n-1}) + F(x_n) \right]$$

$$F = \frac{A}{\int_0^t c(t) \cdot dt}$$

$$S(5) = \frac{1}{3} \left[\begin{array}{l} 0, 0 + 20 \\ 4(15 + 30) \\ 2(25 + 45) \end{array} \right] \rightarrow \begin{array}{l} \cancel{0, 0 + 400} \\ \cancel{4(225 + 900)} \\ \cancel{2(625 + 2025)} \end{array}$$

$$S = \frac{1}{3} [20 + 4(45) + 2(70)]$$

$$S = \frac{1}{3} (340)$$

$$S = \underline{\underline{113,33}}$$