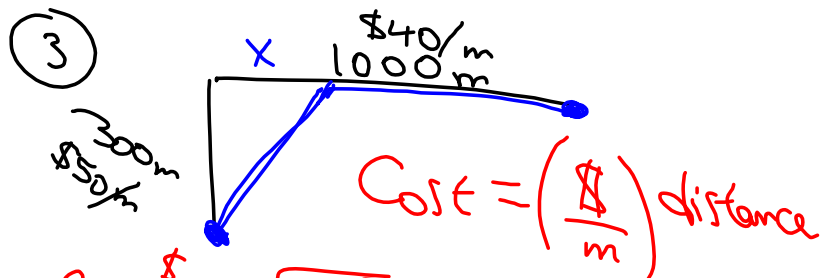


$$\frac{\text{MIN } t}{t} = \frac{d_1}{v_1} + \frac{d_2}{v_2}$$



$$C = \frac{\$50}{m} \sqrt{x^2 + 300^2} + \frac{\$40}{m} (1000 - x)$$

$$C' = 50x(x^2 + 90000)^{-\frac{1}{2}} - 40 = 0$$

$$\frac{50x}{\sqrt{x^2 + 90000}} = 40$$

$$2500x^2 = 40^2(x^2 + 300^2)$$

$$2500x^2 - 1600x^2 = (90000)40^2$$

$$900x^2 = (90000)40^2$$

$$x = 400m$$