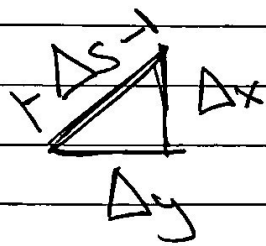


## PROBLEM 2

$$f = 10 \text{ Hz} \quad \Delta u = 0.1 \text{ mm}$$

$$T = 0.1 \text{ s}$$



$$\Delta s = \sqrt{(\Delta x)^2 + (\Delta y)^2}$$

$$\Delta s \approx 0.1414 \text{ mm}$$

$$v = \frac{\Delta s}{T} \Rightarrow \boxed{v_{\text{Max}} \approx 1.414 \frac{\text{mm}}{\text{s}}}$$