

PP/349

5.  $\Delta d = 6.0 \text{ m}$

$f = 10.0 \text{ Hz}$

$\lambda = 0.75 \text{ m}$

a)  $v = ?$

b)  $\Delta t = ?$

a)  $v = \lambda f$   
 $v = (0.75 \text{ m})(10.0 \text{ Hz})$

$v = 7.5 \text{ m/s}$

b)  $v = \frac{\Delta d}{\Delta t}$

$\Delta t = \frac{\Delta d}{v}$

$\Delta t = \frac{6.0 \text{ m}}{7.5 \text{ m/s}}$

$\Delta t = 0.80 \text{ s}$