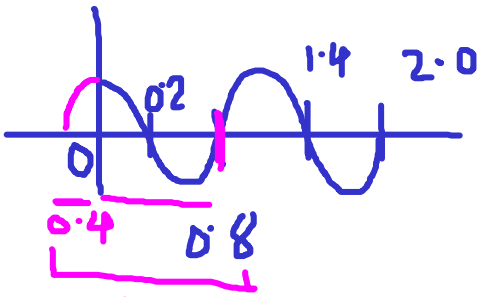
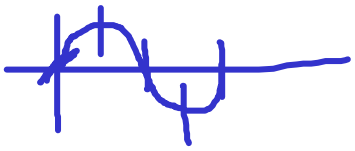
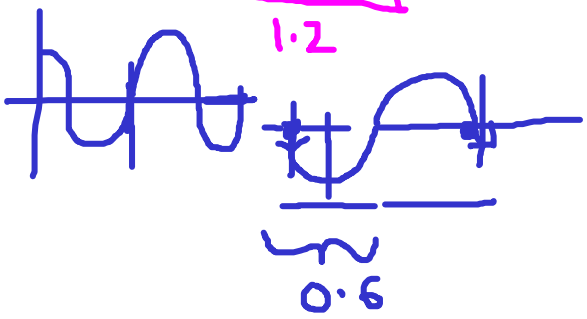


$T = ?$
$\omega = ?$
$\delta = ?$



$\delta = 1 \cdot 2\pi$



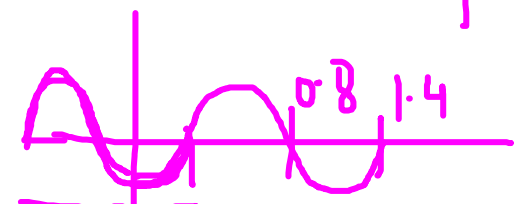
$T = 0 \cdot 6 \times 2 = 1 \cdot 2$

$\omega = \frac{2\pi}{T}$

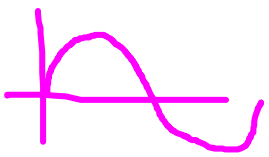
$\frac{2\pi}{1 \cdot 2}$

$1 \cdot 2 \longrightarrow 2\pi$

$0 \cdot 4 \longrightarrow \frac{2\pi}{1 \cdot 2} \times 0 \cdot 4$

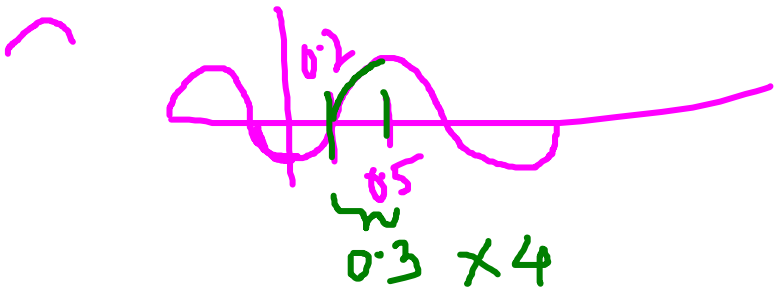


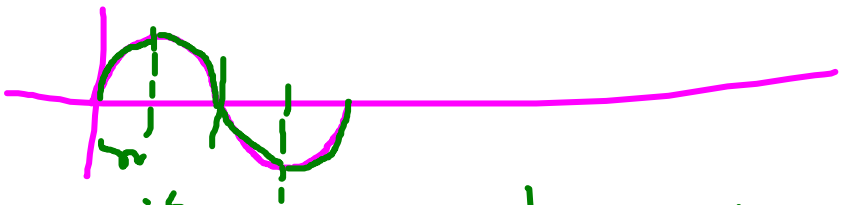
$T = 1 \cdot 2$
$\delta = \frac{2}{3}\pi$
$\omega =$

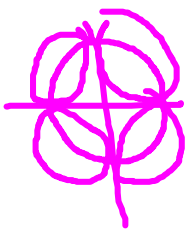


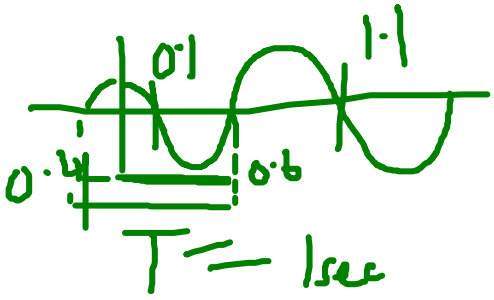
$T =$

$\delta =$
$\omega =$



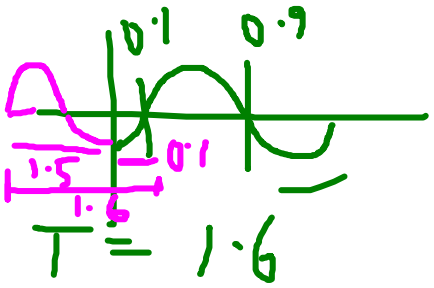






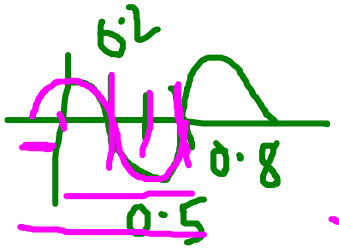
$T = 1\text{sec}$

$\omega = 2\pi$



$T = 1.6$

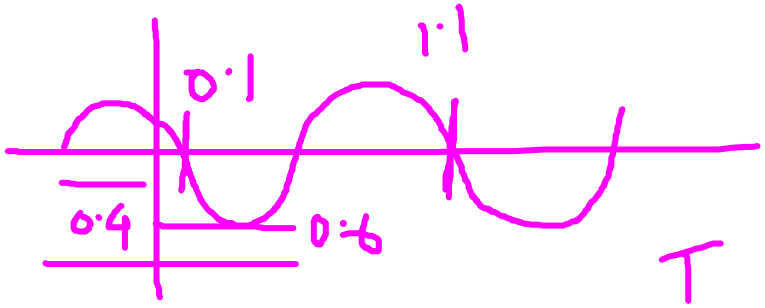
$\omega = \frac{5\pi}{4}$



$T = 1.2$

$\omega = \frac{5\pi}{3}$

$\delta = \frac{4}{5}\pi$



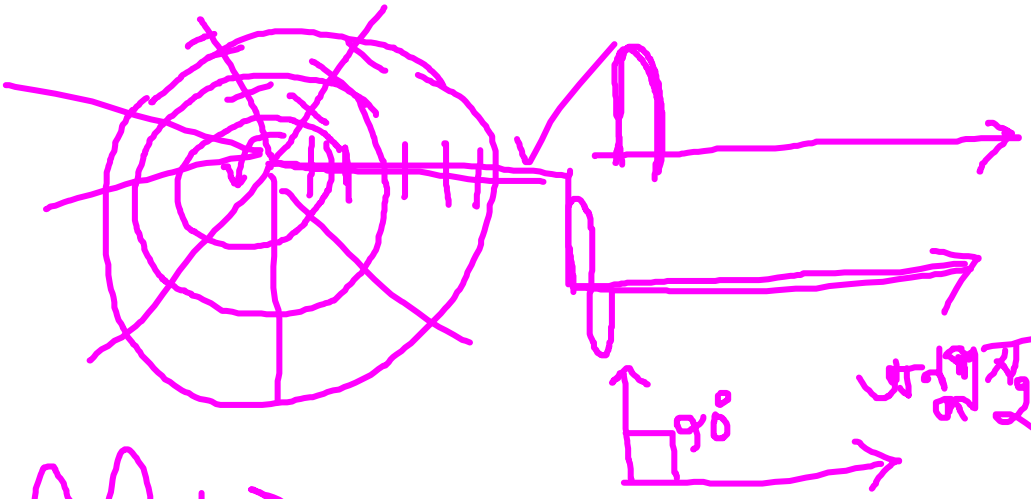
T ω δ

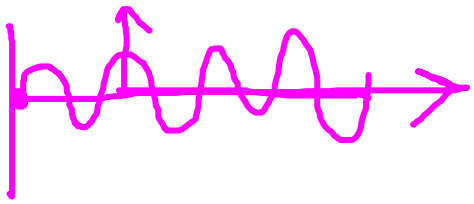
$T = 1$

1 — 2π

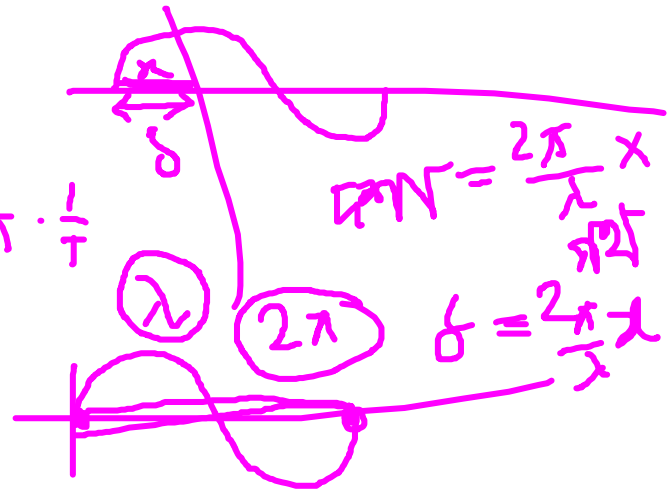
1sec

0·4 —





✓ $y = A\sin(\omega t + \delta)$



$\frac{1}{T} = f$

$v = f\lambda$

$f = \frac{v}{\lambda}$

$\omega = \frac{2\pi}{T} = 2\pi \cdot \frac{1}{T}$

$= 2\pi f$

$\omega = 2\pi \frac{v}{\lambda}$

$\text{দশা} = \frac{2\pi}{\lambda} \times \text{পথ}$

$\delta = \frac{2\pi}{\lambda} x$

$$y = A\sin\left(\frac{2\pi v}{\lambda} t + \frac{2\pi}{\lambda} x\right)$$

$$y = A\sin\frac{2\pi}{\lambda}(vt + x)$$

কণার

তরঙ্গের

কণার
v স্থান

$y = A\sin(\omega t + \delta)$

$$\frac{d}{dt} y = \frac{d}{dt}\left(A\sin(\omega t + \delta)\right)$$

$$v = A\frac{d}{dt}\left(\sin(\omega t + \delta)\right)$$

$$= A\omega\cos(\omega t + \delta)$$

$$\frac{d}{dt} v = \frac{d}{dt}\left(A\omega\cos(\omega t + \delta)\right)$$

$$= A\omega\frac{d}{dt}\cos(\omega t + \delta)$$

$$= A\omega\left(-\omega\sin(\omega t + \delta)\right)$$

$F \propto a$

$F \propto y$

$a \propto y$

$= -\omega^2$

$A\sin(\omega t + \delta)$

$a = -\omega^2 y$

$a \propto -y$

$$y = A\sin\frac{2\pi}{\lambda}(vt - x)$$

$V = ?$

$$v = \frac{dy}{dt} = \frac{d}{dt}\left(A\sin\frac{2\pi}{\lambda}(vt - x)\right)$$

$$\frac{d}{dt} A\sin\left(\frac{2\pi}{\lambda}vt - \frac{2\pi}{\lambda}x\right)$$