Sinusoidal Transverse Traveling Wave

Wave function: $y(x,t) = A\sin(kx - \omega t)$

- $k = \dfrac{2\pi}{\lambda}$ (wave number)
- λ (wavelength)
- $\omega = \dfrac{2\pi}{T} = 2\pi f$ (angular frequency)
- $f = \dfrac{\omega}{2\pi} = \dfrac{1}{T}$ (frequency)
- T (period)
- $c = \dfrac{\lambda}{T} = \lambda f = \dfrac{\omega}{k}$ (wave speed)