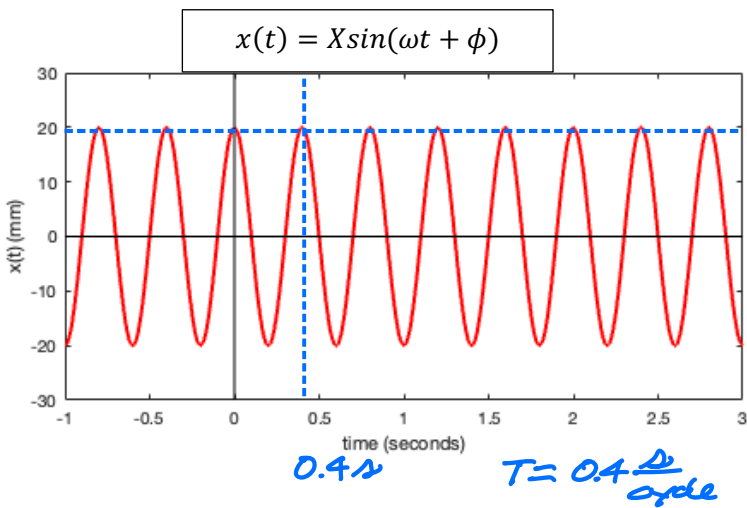
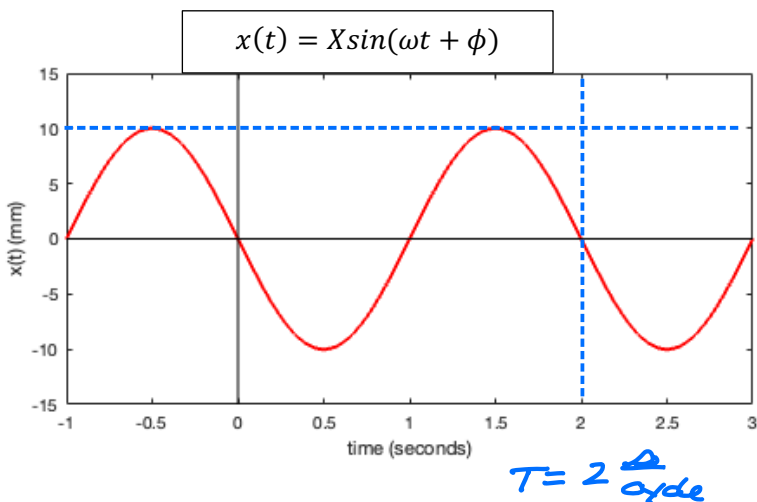


$X = 8 \text{ mm}$
 $\omega = 2\pi f = 2.86\pi \frac{\text{rad}}{\text{s}}$
 $f = \frac{1}{T} = \frac{1}{0.7} \frac{\text{cycle}}{\text{s}} = 1.43 \text{ Hz}$
 $\phi = 0$



$X = 20 \text{ mm}$
 $\omega = 2\pi f = 5\pi \frac{\text{rad}}{\text{s}}$
 $f = \frac{1}{T} = 2.5 \text{ Hz}$
 $\phi = \frac{\pi}{2}$



$X = 10 \text{ mm}$
 $\omega = 2\pi f = \pi \frac{\text{rad}}{\text{s}}$
 $f = \frac{1}{T} = 0.5 \text{ Hz}$
 $\phi = \pi$