(a) What is amplitude A?

When \( y = 0 \) then object is at max displacement.

\[ M.A. \text{ since } x = 0.120 \text{ m when } y = 0 \text{ then } \]

\[ A = 0.120 \text{ m} \]

(b) When in period \( T \)?

Looks on plus of \( x \) vs. \( t \) above. We see that 0.8 sec is the half of period (\( -A \) to \( +A \)). To get from 0 to \( +A \) we need

\[ T = 1.6 \text{ sec} \]

(c) When in frequency \( f \)?

\[ f = \frac{1}{T} \text{ for } f = \frac{1}{1.6 \text{ sec}} = 0.625 \text{ Hz} \text{ or } 0.625 \text{ Hz} \]