

CQ 14.2

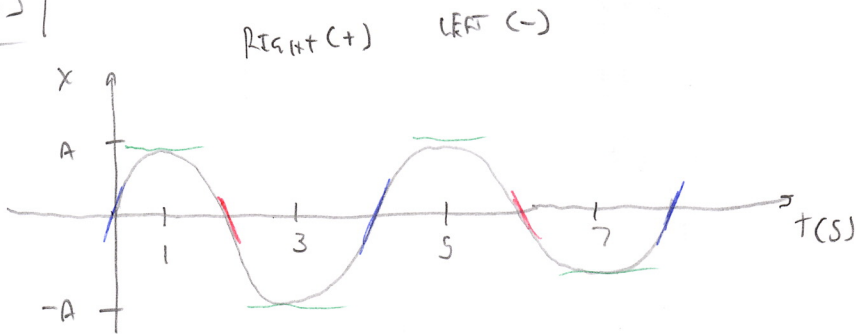
HEART RATE

BEATS ← # OF OSCILLATIONS  
MIN ← UNIT OF TIME

$$f = \frac{\# \text{ OSCILLATIONS}}{\text{UNIT TIME}}$$

SO HEART RATE IS A FREQUENCY

CQ 14.3



a) RIGHT @ MAX SPEED?

$X(t)$   
 $V_x(t)$  } SCOPE     $\text{MAX } V \rightarrow \text{MAX (SCOPE)}$

@  $t = 0 \text{ s}, 4 \text{ s}, 8 \text{ s}$

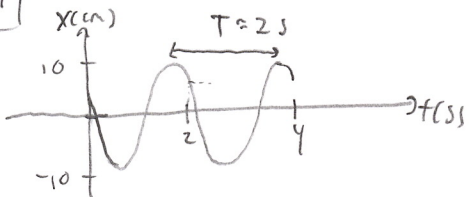
b) LEFT @ MAX SPEED?    NEG  $V_x$

@  $t = 2 \text{ s}, 6 \text{ s}$

c) @ REST ...    SCOPE = 0 →  $V_x = 0$

@  $t = 1 \text{ s}, 3 \text{ s}, 5 \text{ s}, 7 \text{ s}$

CQ 14.9



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

$$f = 0.5 \text{ Hz}$$

AMPLITUDE  $X_{\text{max}} = 10 \text{ cm}$