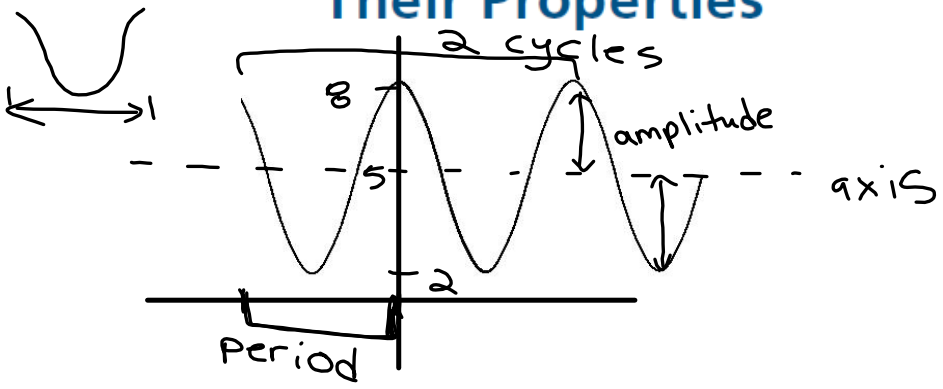
6.1 Periodic Functions and Their Properties

May 11



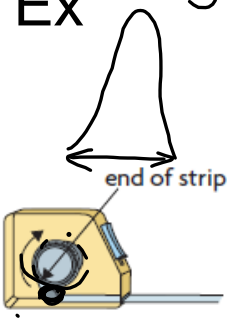
cycle
period
axis
amplitude

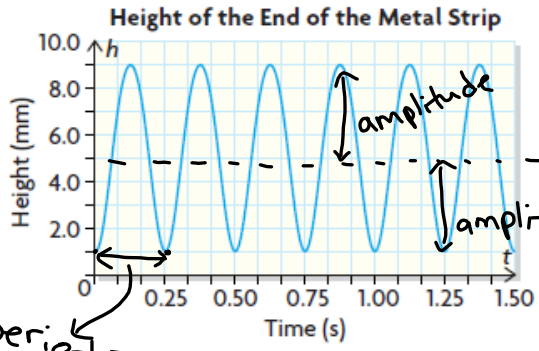
$$\text{Amplitude} = \frac{y_{max} - y_{min}}{2}$$

$$\text{Axis, } y = \frac{y_{max} + y_{min}}{2} = \frac{8+2}{2} = 5$$ (average)

Ex

period
cycle
axis
amplitude





#cycles = 6

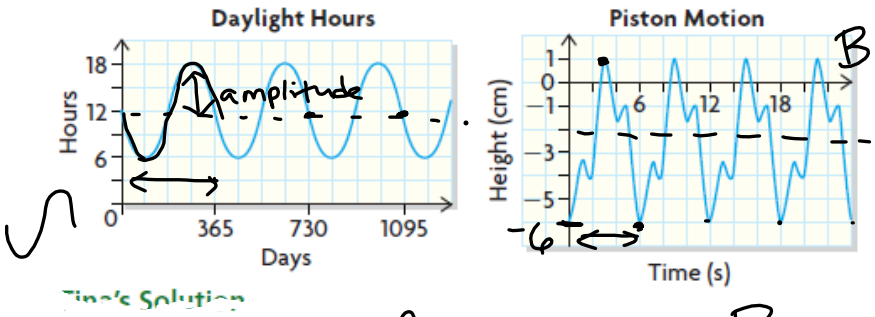
$$\text{axis} = \frac{y_{max} + y_{min}}{2} = y = 5$$

$$= \frac{9+1}{2}$$

$$= 5$$

period = 0,25 s

$$\text{amplitude} = \frac{y_{max} - y_{min}}{2} = \frac{9-1}{2} = 4$$



Tina's Solution

	A	B	
period	365	6	✓
# cycles	3.5	4	✓
axis	12	-2.5	0
amplitude	6	3.5	✓

not a periodic function

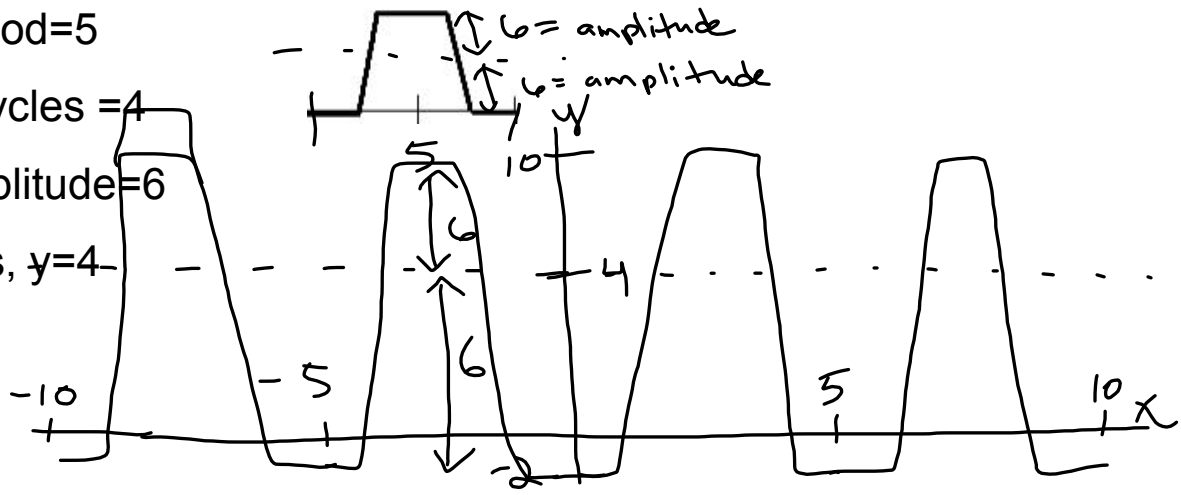
Ex. Sketch the following pattern, given:

period=5

cycles =4

amplitude=6

axis, y=4



p. 352#2,3,4,7-11