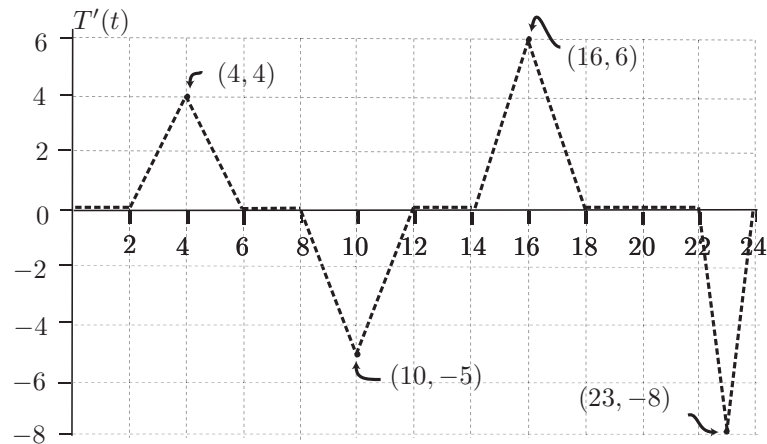


6. Suppose  $H(c)$  gives the average temperature, in degrees, that can be maintained in Oscar's apartment during the month of December as a function of the cost of the heating bill,  $c$ , in dollars. In complete sentences, give a practical interpretation of the following:

(a) (3 points)  $H(50) = 65$

(b) (3 points)  $H'(50) = 2$

Suppose  $T(t)$  gives the temperature in Oscar's apartment on December 18th in  $^{\circ}\text{F}$  as a function of the time,  $t$ , in hours since 12:00 midnight. Below is a graph of  $T'(t)$ : (**NOTE: the graph is of  $T'(t)$ .**)



- (c) (6 points) When Oscar gets home from work at 6 pm the temperature in his apartment is 67 degrees. What was the temperature when he left for work at 8 am?
- (d) (4 points) If the temperature at 6 pm is 67 degrees, what is the minimum temperature in the apartment on December 18th?