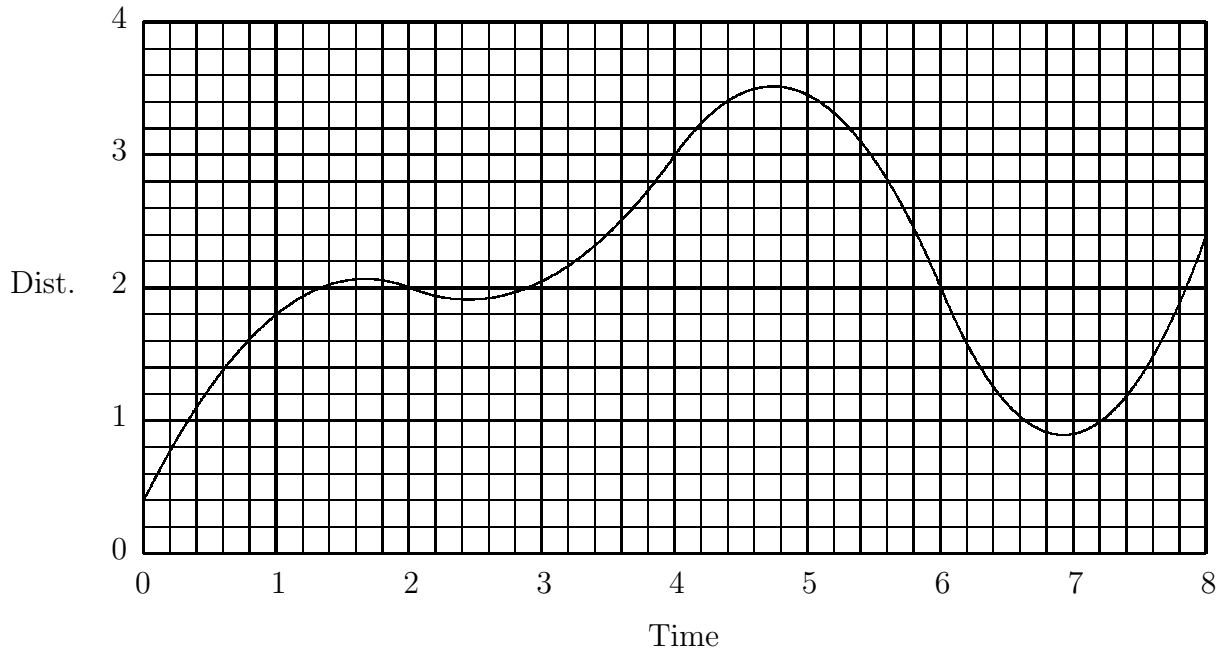


Quiz

Name: _____

Below is the graph the distance D (measured in feet) of a moth from a light bulb as a function of time t (measured in seconds).



1. Estimate the rate of change of D with respect to t when $t = 6$ seconds and give the units on the rate of change.
2. At what times is the rate of change $D'(t) = 0$.
3. On what intervals is the rate on change $D'(t)$ negative?
4. At what time is the month moving *toward* the light bulb at the greatest speed?
5. Let $f(u) = 10^{u-1}$. Then estimate the rate of change $f'(1)$ accurate to one decimal place.