## Name:

## Section 2.1 - In class example

Math 151 - Spring 2018


1. The Figure above shows the cost, $y=f(x)$, of manufacturing $x$ kilograms of a chemical.
(a) Is the average rate of change of the cost greater between $x=0$ and $x=3$, or between $x=3$ and $x=5$ ? Explain your answer graphically.
(b) Is the instantaneous rate of change of the cost of producing $x$ kilograms greater at $x=1$ or at $x=4$ ? Explain your answer graphically.
(c) What are the units of these rates of change?
2. For the function shown in Figure below, at what labeled points is the slope of the graph positive? Negative? At which labeled point does the graph have the greatest (i.e., most positive) slope? The least slope (i.e., negative and with the largest magnitude)?

