

6. (9 points) You feel that you need to escape the cold climate before you return to school, so you decide to drain your saving account and head for somewhere warm and tropical. However, the cost of airline tickets seems to vary from day to day, moment to moment. At the eggnog party you meet a person who works in airline ticket pricing. He actually gives you a web site where you can check out the rate at which the cost of tickets on your preferred airline is changing at any given moment on a given day. (At this site, the rate of change is defined for all times, t .)

(a) If the rate of change is negative, would you be inclined to buy or wait? Why?

(b) If the rate of change is equal to zero, what would that mean? Explain.

(c) If you could get the formula for the data generated on the web site, would that help you to decide what to do in the case of part (b)? If so, how? If not, why not?