

Name:

Section 1.2 - In class example

Math 151

1. Annual revenue R from McDonald's restaurants worldwide can be estimated by

$$R = 19.0 + 2.0t$$

where R is in billion dollars and t is in years since January 1, 2015.

- (a) What is the slope of the revenue function? Include units. Interpret the slope in terms of McDonald's' Revenue.
- (b) What is the vertical intercept of this function? Include units. Interpret the vertical intercept in terms of McDonald's revenue.
- (c) What annual revenue does the function predict for 2015?
- (d) When does the annual revenue hit 35 billion?
- (e) Suppose instead, the annual revenue on January 1, 2015 is \$23.5 and grows at a rate of \$3.2 billion per year. Write down a function that describes the revenue over time t in years since January 1, 2015.