Math 157 - Quiz 1

August 24, 2016

Name ____________________

Score __________

Show all work to receive full credit. Supply explanations when necessary. YOU MUST WORK INDIVIDUALLY.

---

1. (4 points) In predicting the future value of a stock, a financial adviser used the formula

$$V(t) = 0.08t + 34.17,$$

where $V(t)$ represents the value of the stock in dollars t days from today.

(a) Is the value of the stock increasing or decreasing? How do you know?

(b) About how much will the stock be worth in 8 days?

(c) After how many days will the stock be worth \$50?

2. (3 points) A collectible vinyl record album was worth \$10.99 in 1980 and \$76.35 in 2016. Assume that its value can be described by a linear function. Find a formula for the value of the record album as a function of time (in years). Then use your formula to estimate the record's value in 2000.

3. (3 points) Without graphing, determine whether the table describes a linear function.

x	1	2	4	8	13
y	10	13	19	32	46