MATH 422 Math for Business Applications **Spring 2023**

Weekly Quiz 4/20/23 **Name**_____

Directions: Please answer the following questions to the best of your ability. Provide reasoning when asked. Quizzes will all be 15 points each. (I will not share your responses with anyone.)

1. (**10 points**) What have you liked BEST about this course (so far)? Please select ONE or TWO:
   A. the way new material is presented in class (balance between lecture and active participation)
   B. the focus on understanding concepts instead of memorizing formulas
   C. the variety of assignments (such as Excel)
   D. the use of MyOpenMath (videos, practice)
   E. the "difficulty" for a college course was just right for me – not too hard, not too easy
   F. Other (be specific) _____

Follow-up: If you could adjust one thing about the class, describe how you would change it:

Question 2 is based on the following graph of average life expectancy in the United States:

Some key data points that you will need: (1860, 39.41) , (1865, 35.1) , (1900, 48.19) , (1940, 62.07) , (1980, 73.25) , (2015, 78.94) , (2000, 76.47), (2020, 78.81)

2. **(5 points)** What is the average rate of change of life expectancy (per year) between **1900** and **2000**?

_____ expected years of life per year

REFERENCE SHEET

Formulas you may need:

Average rate of change of a function f(x) on an interval [a,b] is (f(b) – f(a)) ÷ (b-a)

Other ways of writing this formula: $\frac{f(b)-f(a)}{b-a} = \frac{\Delta y}{\Delta x} = (y_2 - y_1) \div (x_2 - x_1)$

Data and graph:

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