

**Quiz 5****Name:** \_\_\_\_\_**Week 7: 02/25/2020****Math 285: Spring 2020****Instructor: Garrett Hartshaw**

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**Instructions:**

Please answer the questions below. Show all your work. You may use a TI-84/85 (or equivalent) calculator.

Find the derivative of the following functions.

**Problem 1.** (5 points)  $f(x) = x^5 + 2x^4 - 7x^3 - 10x^2 + 3x + 5$

**Problem 2.** (5 points)  $f(x) = \frac{x^2 + 2}{x^3 + 3x}$

**Problem 3.** (5 points)  $\sqrt{x^2 + 3x - 7}$

**Problem 4.** (5 points)  $f(x) = \frac{(x^2 + 3x + 1)(x^2 - 2x + 3)}{x^2 - 3x - 6}$