Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Advanced Functions and Modeling Unit 10 Homework 1**

**Show all of your work on a separate sheet of paper.**

**Find the quotient and remainder using long division.**

1. 2.

**Find the quotient and remainder using synthetic division.**

3. 4.

**Find a polynomial of the specified degree that has the given zeros.**

5. Cubic; zeros at 6. Quartic;

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