

Use your notes/book if needed, but not the internet. ALL YOUR WORK must be seen for any credit to be earned.

1. (4 points) Six years from now, Ramona wants to put a \$15,000 down payment on a home. The bank is offering 2.5% annual interest on deposits, compounded monthly. How much money would Ramona need to invest in this bank in order to reach her goal? (Use your calculator to give a monetary answer, but show all work leading up to it.)

2. (4 points) Tyrell invests \$10,000 at an interest rate of 4%, compounded continuously. Show that the amount of money Tyrell has after 25 years is more than \$25,000 *without using a calculator*. Clearly explain how you arrived at this conclusion.

3. (2 points) Effective interest rate is a bit more than nominal (stated) interest rate. Explain why this is true.