Math 131 - Quiz # 2- ID #   Name:

_____

1) Find the dual of the linear programming problem

$$\max Z \quad = \quad 3x_1 - 2x_2 + x_3$$
$$\text{subject to}$$
$$\begin{cases} 2x_1 + x_2 - 2x_3 \leq 2 \\ x_1 + x_2 + x_3 \leq 1 \\ x_1, x_2, x_3 \geq 0 \end{cases}$$

2) How long will it take for \$500 to amount to \$800 at an annual rate of 5% compounded quaterly?

3) What effective rate is equivalent to a nominal rate of 8% compounded semi-annually?

4) Find the present value of \$900 due after five years if the interest rate is 6% compounded monthly.