## Algebra II Class Worksheet \#4 Unit 10 page 1

1. $\$ 600$ is invested in an account paying interest at an annual rate of $\mathbf{6}$ percent compounded monthly. Express the balance of the account, $A$, as a function of the time, $t$, in years. Graph this function for values of $\mathbf{t}$ from $\mathbf{0}$ to $\mathbf{2 0}$ years.

Function: $\qquad$


## Algebra II Class Worksheet \#4 Unit 10 page 2

2. A certain radioactive substance with a mass of 2000 grams has a half-life of 6 years. Express its mass, $Q$, as a function of time, $t$, in years. Graph this function for values of $\mathbf{t}$ from $\mathbf{0}$ to $\mathbf{2 0}$ years.

## Function:

$\qquad$


## Algebra II Class Worksheet \#4 Unit 10 page 3

3. $\$ 600$ is invested in an account paying interest at an annual rate of $\mathbf{6 \%}$ compounded continuously. Express the balance of the account, A, as a function of the time, $t$, in years. Graph this function for values of $\mathbf{t}$ from 0 to 20 years.

## Function:

$\qquad$


