## General Algebra II Worksheet \#10 Unit 12 page 1

Solve the following problems. Show your process neatly organized. Round your answers to the nearest tenth of a year.

1. $\$ 3000$ is invested in an account that pays interest at an annual rate of $\mathbf{2 . 5 \%}$ compounded quarterly. How long will it take for the value of the account to double?
2. $\$ 1000$ is invested in an account that pays interest at an annual rate of $\mathbf{3 . 5 \%}$ compounded monthly. How long will it take for the value of the account to double?
3. $\$ 800$ is invested in an account that pays interest at an annual rate of $7.1 \%$ compounded continuously. How long will it take for the value of the account to double?

## General Algebra II Worksheet \#10 Unit 12 page 2

Solve the following problems. Show your process neatly organized. Round your answers to the nearest tenth of a year.
4. $\$ 10,000$ is invested in an account that pays interest at an annual rate of $\mathbf{4 . 5 \%}$ compounded daily. How long will it take for the value of the account to reach $\mathbf{\$ 2 5 , 0 0 0}$ ?
5. $\$ 200$ is invested in an account that pays interest at an annual rate of $\mathbf{3 \%}$ compounded quarterly. How long will it take for the value of the account to reach $\mathbf{\$ 5 0 0}$ ?
6. $\$ 500$ is invested in an account that pays interest at an annual rate of $5 \%$ compounded continuously. How long will it take for the value of the account to reach $\mathbf{\$ 1 5 0 0}$ ?

## General Algebra II Worksheet \#10 Unit 12 page 3

Solve the following problems. Show your process neatly organized. Round your answers to the nearest tenth of a year.
7. Money is invested in an account that pays interest at an annual rate of $4 \%$ compounded quartery. How long will it take for the value of the account to double?
8. Money is invested in an account that pays interest at an annual rate of $\mathbf{1 . 5 \%}$ compounded daily. How long will it take for the value of the account to double?
9. Money is invested in an account that pays interest at an annual rate of $4 \%$ compounded continuously. How long will it take for the value of the account to double?

