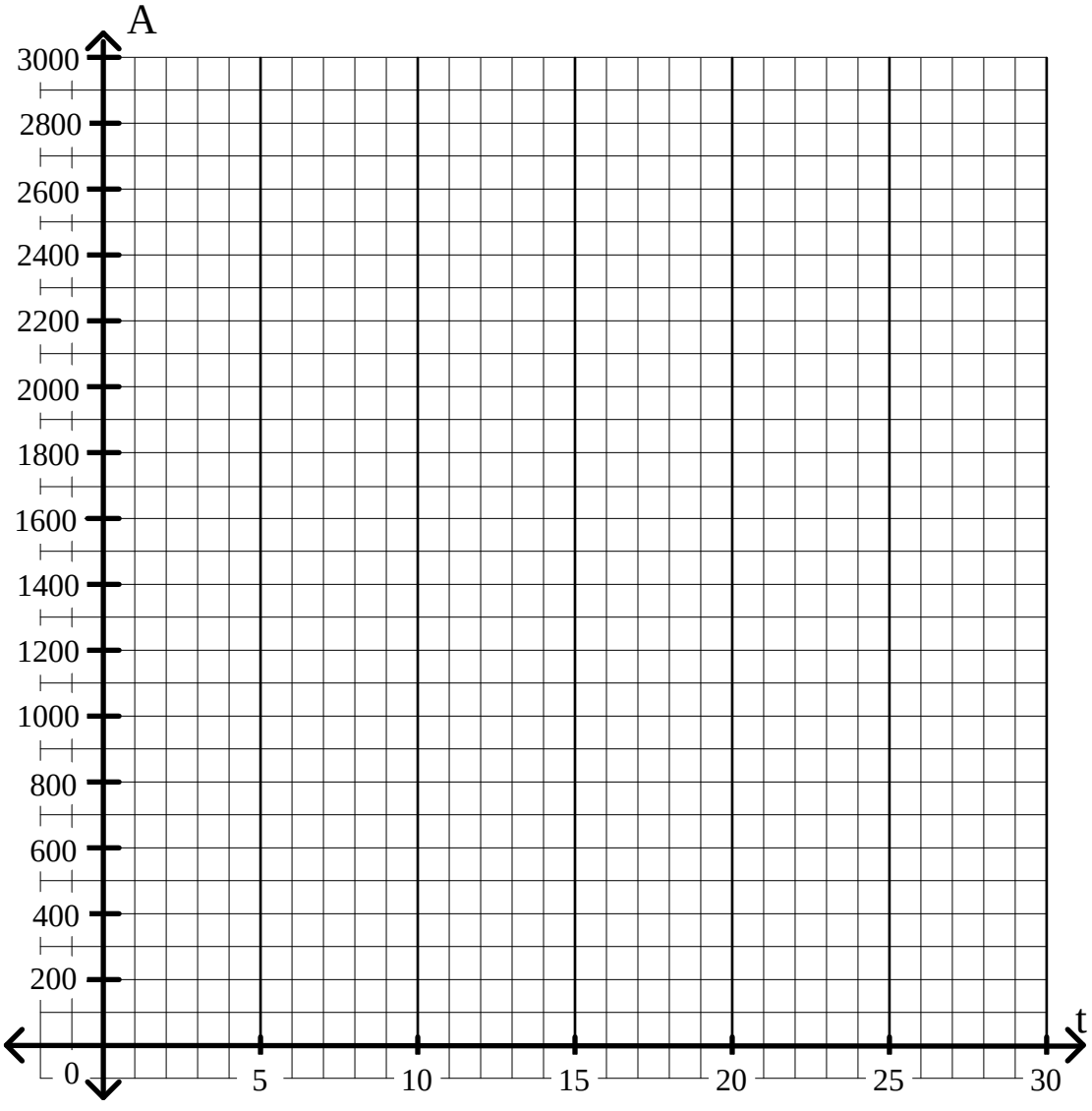
General Algebra 2 Worksheet #10 Unit 11 page 1 _____

1. $400 is invested in an account paying interest at an annual rate of 4% compounded monthly. Express the balance of the account, A, as a function of the time, t, in years. Graph this function for values of t from 0 to 30 years. Label your graph with its equation.

function: _____

2. $1,500 is invested in an account paying interest at an annual rate of 1.5% compounded quarterly. Express the balance of the account, A, as a function of the time, t, in years. Graph this function for values of t from 0 to 30 years. Label your graph with its equation.

function: _____

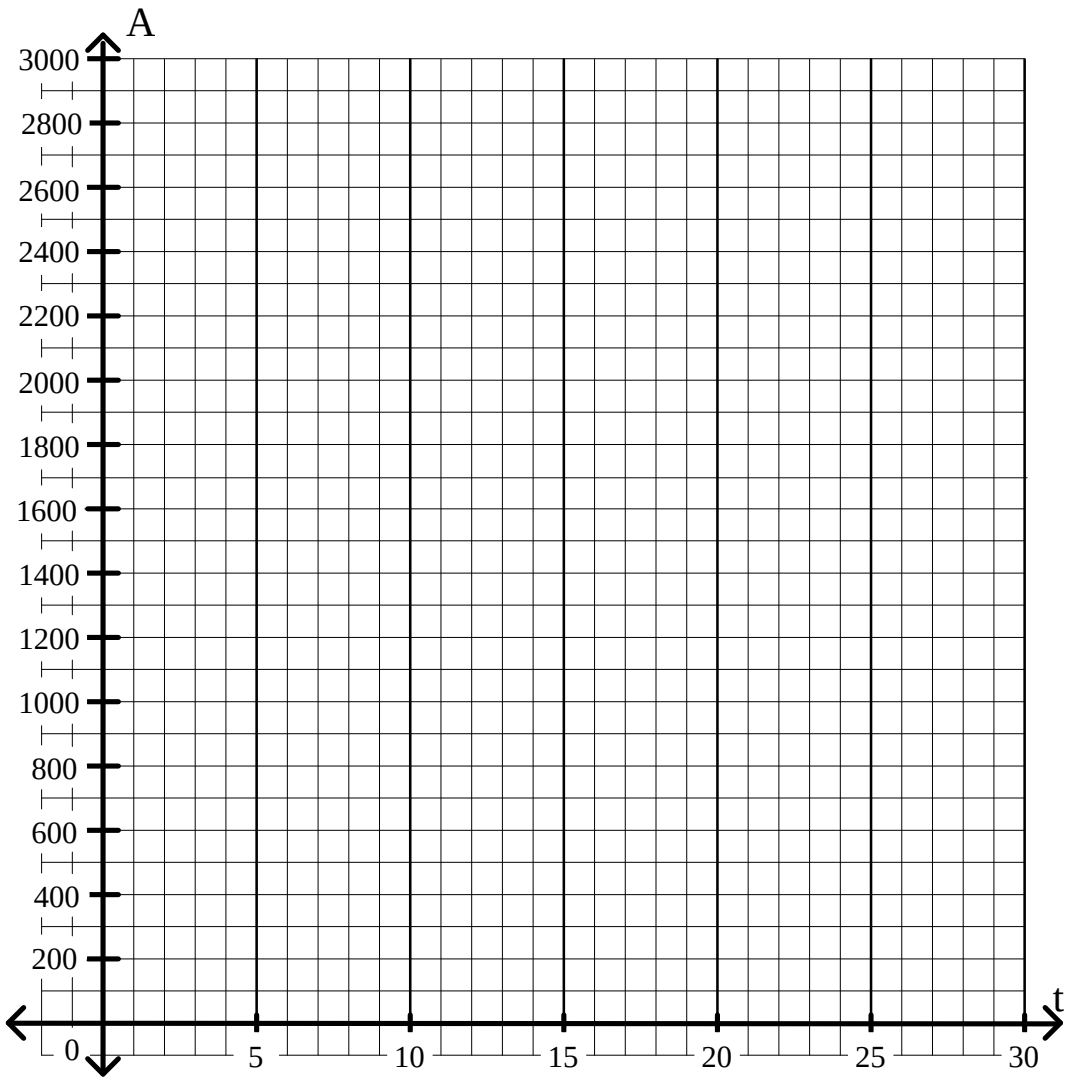


3. $300 is invested in an account paying interest at an annual rate of 8% compounded continuously. Express the balance of the account, A, as a function of the time, t, in years. Graph this function for values of t from 0 to 30 years.

function: _____

4. $1,200 is invested in an account paying interest at an annual rate of 2.5% compounded continuously. Express the balance of the account, A, as a function of the time, t, in years. Graph this function for values of t from 0 to 30 years.

function: _____



5. A certain radioactive substance with a mass of 2500 grams has a half-life of 15 years. Express its mass, Q, as a function of time, t, in years. Graph this function for values of t from 0 to 30 years. Label your graph with its equation.

function: _____

6. A certain radioactive substance with a mass of 3000 grams has a half-life of 8 years. Express its mass, Q, as a function of time, t, in years. Graph this function for values of t from 0 to 30 years. Label your graph with its equation.

function: _____