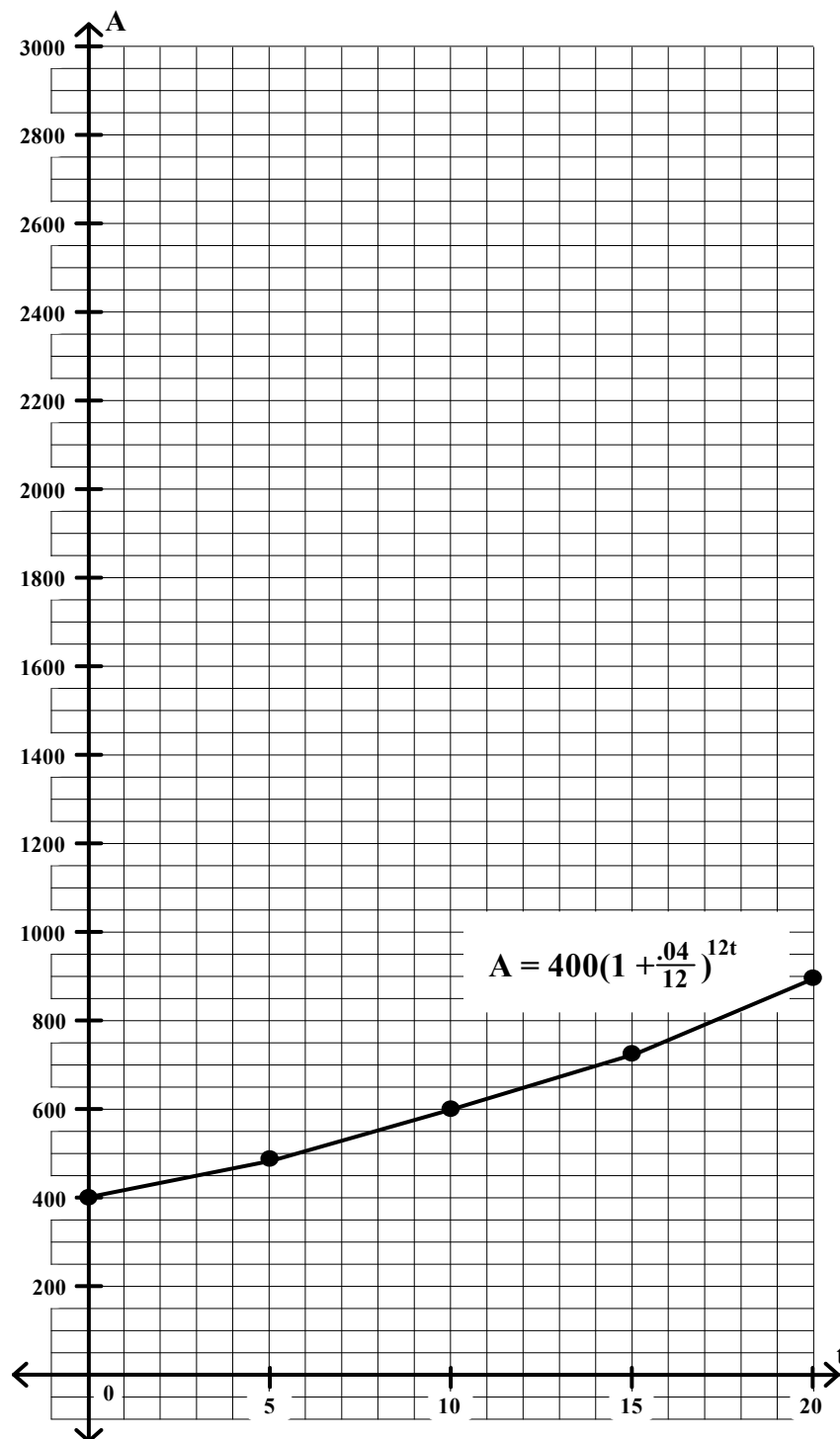


General Algebra 2 Worksheet #10 Unit 11 Selected Solutions page 1

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: $A = 400(1 + \frac{.04}{12})^{12t}$

t	A
0	400
5	488
10	596
15	728
20	889

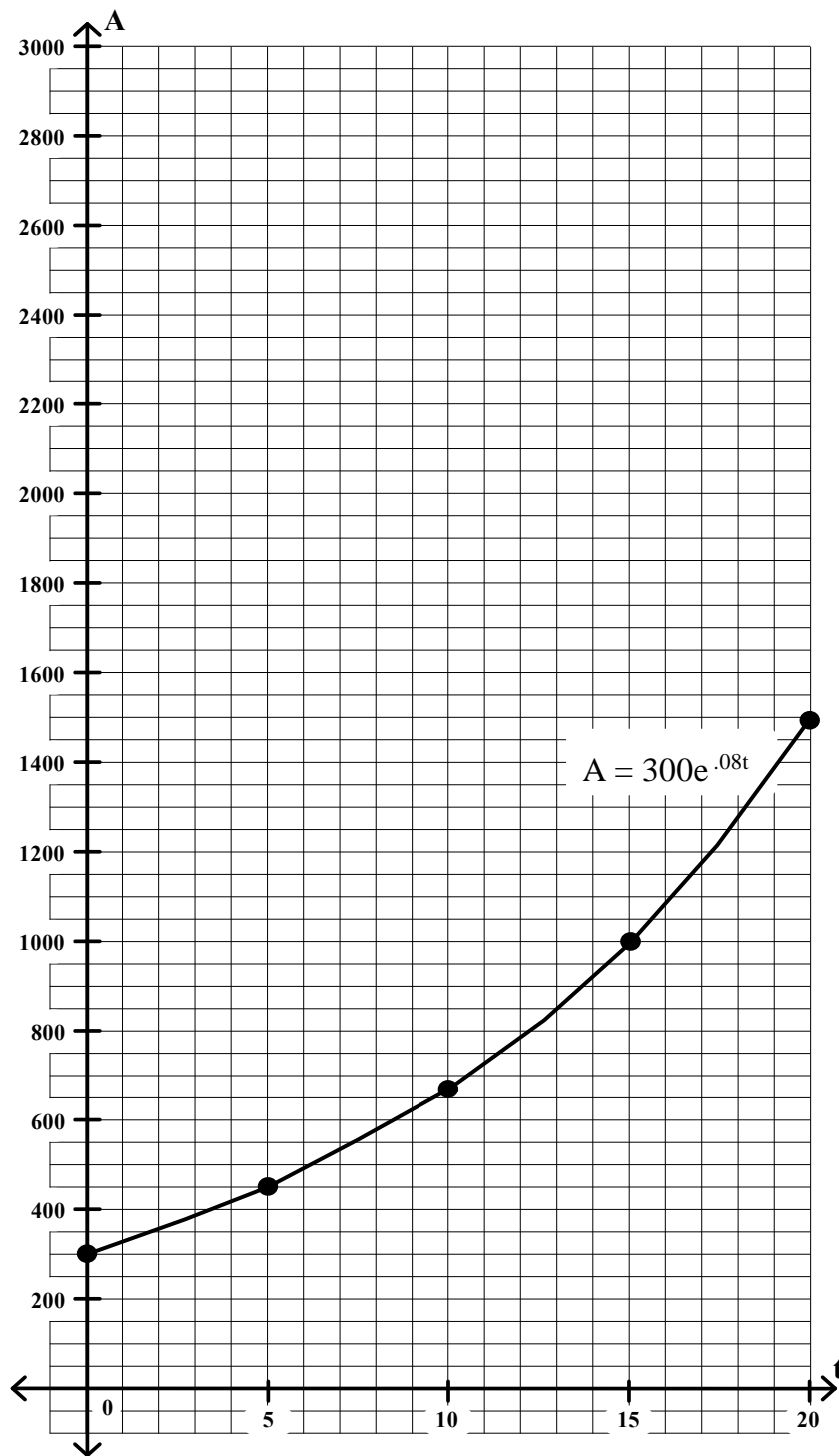


General Algebra 2 Worksheet #10 Unit 11 Selected Solutions page 2

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: $A = 300e^{.08t}$

t	A
0	300
5	448
10	668
15	996
20	1486



General Algebra 2 Worksheet #10 Unit 11 Selected Solutions page 3

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: $Q = 2500(2)^{\frac{-t}{15}}$

t	A
0	2500
5	1984
10	1575
15	1250
20	992
25	787
30	625

