

Make an x/y table using the x -values: $-4, -3, -2, -1, 0, 1, 2, 3, 4$ for the following equations. Then draw the graph using graph paper.

1) $y = 4^x$

2) $y = 4^x - 10$

3) $y = \left(\frac{3}{2}\right)^x$

4) $y = \left(\frac{1}{2}\right)^x$

The following problems involve the use of the compound interest formula, as explained here. If P dollars are deposited in an account earning interest at an annual rate r , compounded k times each year, the amount A in the account after t years is given by:

Formula: $A = P \left(1 + \frac{r}{k}\right)^{kt}$

Determine the amount of money in the account based on this information. Show the equation you are using with the number values. Round to the nearest penny.

5) \$1000 at 2% for 5 years compounded annually

6) \$1000 at 2% for 5 years compounded semi-annually

7) \$1000 at 2% for 5 years compounded quarterly

8) \$2000 at 2% for 5 years compounded annually

9) \$1000 at 4% for 5 years compounded annually

10) \$1000 at 2% for 10 years compounded annually