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