Algebra 2
8.1 D2 Exponential Graphing and Interest Rates
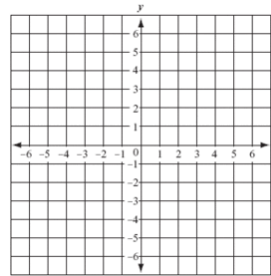
Name: _____ Hour: _____

This is considered an in-class assignment. It is due today before you leave my classroom.

1. $f(x) = -\left(\frac{1}{4}\right)^{x-2} + 1$

Growth / Decay
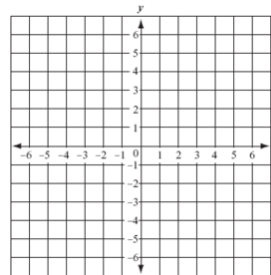
Parent Function: _____

Transformations: _____

2. $y = 2\left(\frac{1}{3}\right)^{x} + 2$

Growth / Decay

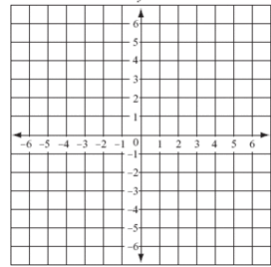Parent Function: _____

Transformations: _____

3. $g(x) = -5^{x+2} - 1$

Growth / Decay

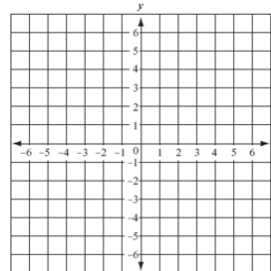Parent Function: _____

Transformations: _____

4. $y = \frac{1}{2} * 2^{x} - 3$

Growth / Decay

Parent Function: _____

Transformations: _____

5. If $12,000 is invested at 4% annual interest compounded monthly, how much will the investment be worth in 10 years? Give your answer to the nearest dollar.

6. Rebecca is training for a marathon. Her weekly long run is currently 5 miles. If she increases her mileage each week by 10%, will she complete a 20 mile training run within 15 weeks?

7. Naya invests $7500 in an account which accrues interest continually at a rate of 4.5%. How much money will be in the account after 8 years?