

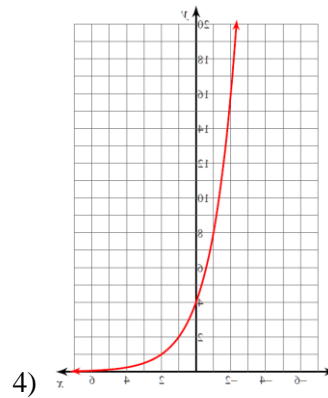
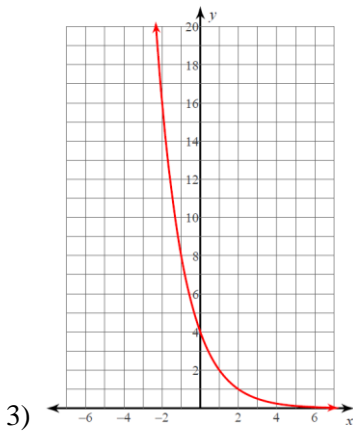
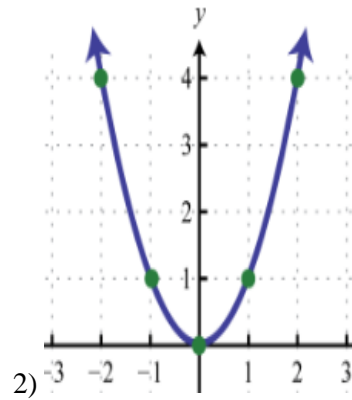
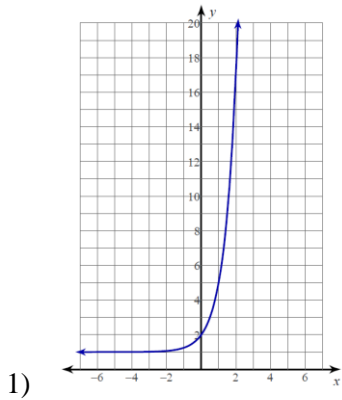
Name:

Date:

Block:

Exponential Functions: Growth & Decay

Directions: State in the space to the right whether each graph below represents an exponential decay, exponential growth, or neither. Explain how you know.



Directions: Complete each function

5. $y = 2000 \cdot (1.05)^t$

A. Does this function represent exponential growth or exponential decay?

B. What is your initial value?

C. What is the rate of growth or rate of decay?

6. $y = 14000 \cdot (0.92)^t$

A. Does this function represent exponential growth or exponential decay?

B. What is your initial value?

C. What is the rate of growth or rate of decay?

7. $y = 2250 \cdot (1 - 0.9)^t$

A. Does this function represent exponential growth or exponential decay?

B. What is your initial value?

C. What is the rate of growth or rate of decay?

Name:

Date:

Block:

Exponential Functions: Growth & Decay

Directions: A) Tell whether the functions below represent exponential decay, exponential growth, or neither. B) Identify the y-intercept, the base and the asymptote if applicable.

8) $y = 5^x$

growth or decay or neither

y- intercept: _____

base: _____

asymptote: _____

9) $y = 0^x$

growth or decay or neither

y- intercept: _____

base: _____

asymptote: _____

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

growth or decay or neither

y- intercept: _____

base: _____

asymptote: _____