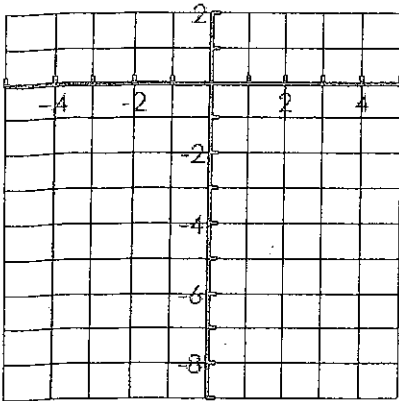


Graphing and Characteristics of Exponential Equations

Name _____

Date _____

1. $y = -5^x - 3$



x	y
0	-4
1	-8
2	-18

Transformations: _____

State 3 points on Graph: _____

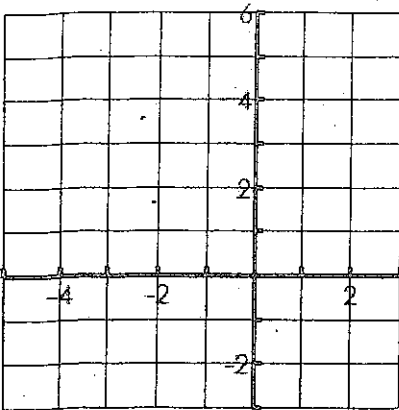
Domain: _____ Range: _____

Asymptote: _____ Increasing or Decreasing _____

X-intercept: _____ Y-intercept: _____

End Behavior: As $x \rightarrow +\infty$, $f(x) \rightarrow$ _____
 As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

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



x	y
-3	1
-4	1/3
-5	1/9

Transformations: _____

State 3 points on Graph: _____

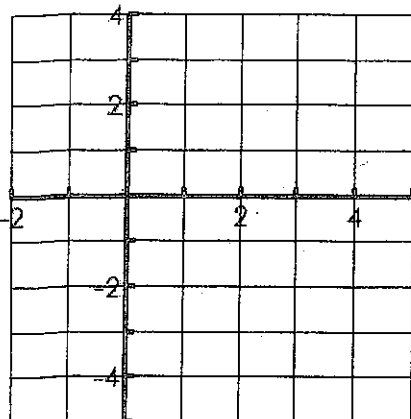
Domain: _____ Range: _____

Asymptote: _____ Increasing or Decreasing _____

X-intercept: _____ Y-intercept: _____

End Behavior: As $x \rightarrow +\infty$, $f(x) \rightarrow$ _____
 As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

3. $y = 4^{x-2} - 3$



x	y
2	-2
3	-1
4	0

Transformations: _____

State 3 points on Graph: _____

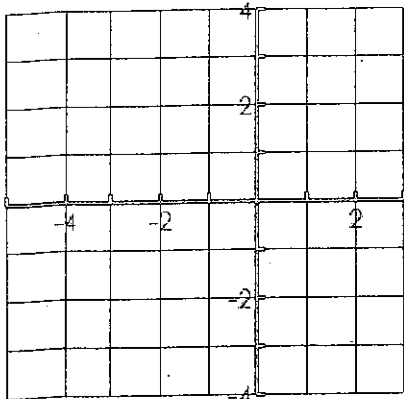
Domain: _____ Range: _____

Asymptote: _____ Increasing or Decreasing _____

X-intercept: _____ Y-intercept: _____

End Behavior: As $x \rightarrow +\infty$, $f(x) \rightarrow$ _____
 As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

4. $y = -2^{x+1} + 1$



x	y
-1	0
0	-1

Transformations: _____

State 3 points on Graph: _____

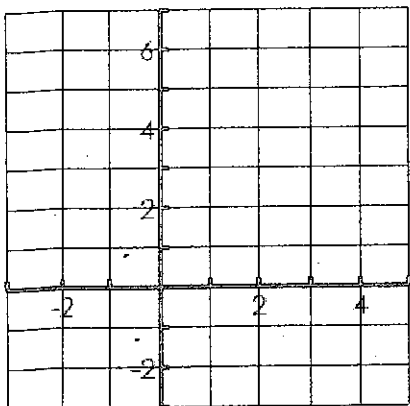
Domain: _____ Range: _____

Asymptote: _____ Increasing or Decreasing

X-intercept: _____ Y-intercept: _____

End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____
 As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

5. $y = 3^{x-3} + 1$



x	y
3	2
4	4
5	10

Transformations: _____

State 3 points on Graph: _____

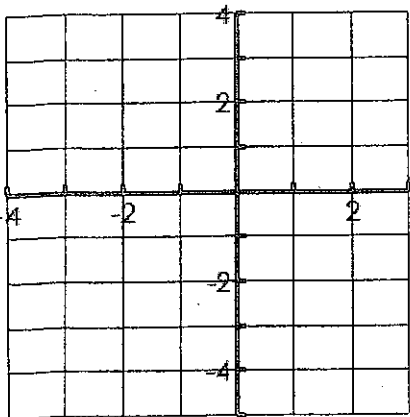
Domain: _____ Range: _____

Asymptote: _____ Increasing or Decreasing

X-intercept: _____ Y-intercept: _____

End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____
 As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____

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



x	y
-1	-1
-2	-2
-3	-3

Transformations: _____

State 3 points on Graph: _____

Domain: _____ Range: _____

Asymptote: _____ Increasing or Decreasing

X-intercept: _____ Y-intercept: _____

End Behavior: As $x \rightarrow \infty$, $f(x) \rightarrow$ _____
 As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____