Sec 6.1 B Graphing Exponential Functions

Part A   Graph the following functions. For each problem:

1. Identify the y-intercept
2. Identify the the factor of growth or decay
3. Make a t-table with input -2, -1, 0, 1, 2
4. Graph the function.

1. $y = 2(3)^x$

a =   b =

5. $y = 2^x$

a =   b =

2. $y = (1/3)^x$

a =   b =

6. $y = -2(1/2)^x$

a =   b =

3. $y = 4(1/2)^x$

a =   b =

7. $y = 3(2)^x$

a =   b =

4. $y = 1/2(4)^x$

a =   b =

8. $y = -3^x$

a =   b =

Part B   Write an exponential function given points on the curve.
1. Use the information to identify the y-intercept "a"
2. Use the values of the output to find the factor "b"
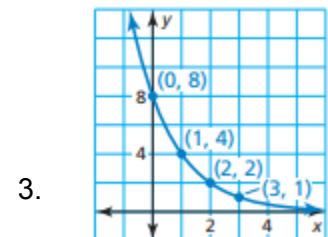3. Write the equation as $y = a(b)^x$

1.

x	0	1	2	3
y	-2	-6	-18	-54

a =   b =

2.

x	0	1	2	3
y	2	14	98	686

a =   b =

3.

(0, 8)
(1, 4)
(2, 2)
(3, 1)

a =   b =