Name _____   Date _____

Year Group _____

Use the graph the answer questions below about the exponential functions

The red exponential function is $f(x) = 2^x$

1. What type of shift happened with the red equation to the orange equation?

   Answer = _____

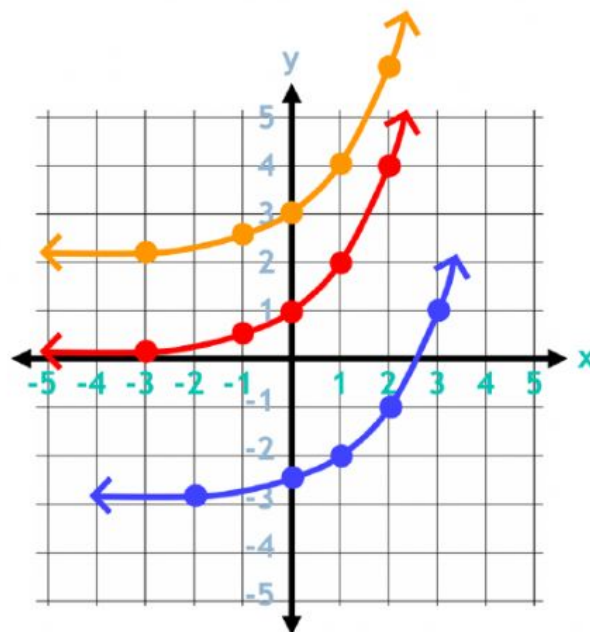2. What is the equation of the orange exponential function?

   Answer = 2^x ____ ____

3. What type of shift happened with the red equation to the blue equation?

   Answer = _____

4. What is the equation of blue exponential function?

   Answer = $2^{(x\,\underline{}\,\underline{})}$ ____ ____

Please drag the numbers to match the description of the exponential functions

5.
   - base 7
   - vertical stretch by a factor of 5
   - horizontal shift 2 to the left
   - vertical shift 3 down

   Answer

   ____ * $7^{(x\,\underline{}\,\underline{})}$ ____ ____

6.
   - base 7
   - vertical shrink by a factor of 5
   - horizontal shift 3 to the right
   - vertical shift 2 up

   Answer

   ____ * $7^{(x\,\underline{}\,\underline{})}$ ____ ____

| 5 | $\frac{1}{5}$ | 2 | 2 | 3 | 3 |

| + | + | − | − |