**Transformations of Exponential Functions**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The equation for an exponential function can be written in the

Translates the exponential function k units \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Translates the exponential function k units \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Translates the exponential function k units \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Translates the exponential function k units \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Examples

1. Given the exponential function …
   1. Write a rule that will move the graph up three units.
   2. Write a rule that will move the graph to the left four units.
   3. Write a rule that will move the graph to the right five units.
   4. Write a rule that will move the graph down two units.
   5. Write a rule that will move the graph to the left three units and up six units.
2. Given the exponential function , describe the transformations that the function went through to provide the following equations

Independent Practice

1. Given the exponential function …
   1. Write a rule that will move the graph up four units.
   2. Write a rule that will move the graph to the left seven units.
   3. Write a rule that will move the graph to the right ten units.
   4. Write a rule that will move the graph down three units.
   5. Write a rule that will move the graph to the left nine units and up one unit.
2. Given the exponential function , describe the transformations that the function went through to provide the following equations