

**Worksheet C: Assessment of Parameter Changes
in Exponential Functions**

1. Given $f(x) = 2^x$:
 - a. Describe a function $g(x)$ that is 3 units to the right of and 5 units down from $f(x)$:

 - b. Describe a function $g(x)$ that is a reflection of $f(x)$ across the x-axis and is 3 units to the right of it:

 - c. Describe a function $g(x)$ that is 3 units to the left and 1 unit up from $f(x)$ and that is a reduction of $f(x)$ by a factor of $1/4$:

 - d. Describe a function $g(x)$ that is 2 units down from $f(x)$ and that is an enlargement of $f(x)$ by a factor of 5:

2. Given $f(x) = 2(5^{x-3}) + 1$, describe how it compares to the function $g(x) = 5^x$.