Name: _____   Date: _____

Learning Goal 7.1	Applying one or more transformations to an exponential function, including translations, stretches and reflections.

More Questions

1. Sketch each base function, then each of the following transformations, without using technology. Identify the transformed values of the given coordinates.

a. $y = 2^x$ $y = 2^{(x-4)} - 3$ b. $y = 2^x$ $y = (2)^{-3(x+5)}$

     $(0, 1)$ $(1, 2)$ $(2, 4)$ $(0, 1)$ $(1, 2)$ $(2, 4)$

c. $y = 3^x$ $y = -2(3)^x + 7$ d. $y = 3^x$ $y = -3^{x+4}$

     $(0, 1)$ $(1, 3)$ $(2, 9)$ $(0, 1)$ $(1, 3)$ $(2, 9)$

e. $y = 5^x$ $y = -\dfrac{1}{2}(5)^{\frac{1}{3}(x+1)} + 4$ f. $y = 5^x$ $y = 3(5)^{-\frac{1}{2}(x-5)} - 8$

     $(0, 1)$ $(1, 5)$ $(2, 25)$ $(0, 1)$ $(1, 5)$ $(2, 25)$