

Matching Exponential Graphs and Equations:

Name: _____

Directions: Match each equation first with a description of the transformations of the equation (number match) and then with its graph (letter match).

$y = 3^x$

Number Match: _____

Letter Match: _____

$y = 3^{-x}$

Number Match: _____

Letter Match: _____

$y = 3^x - 4$

Number Match: _____

Letter Match: _____

$y = -3^{x-2}$

Number Match: _____

Letter Match: _____

$y = -3^{-x}$

Number Match: _____

Letter Match: _____

$y = 3^x + 1$

Number Match: _____

Letter Match: _____

$y = -3^x$

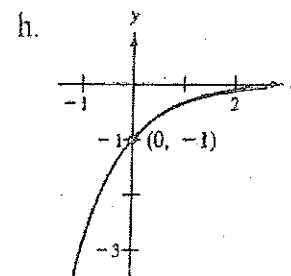
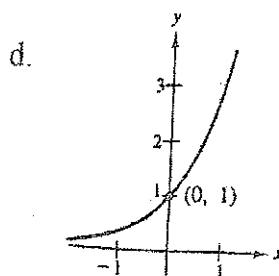
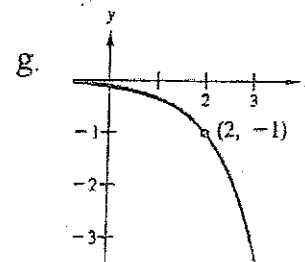
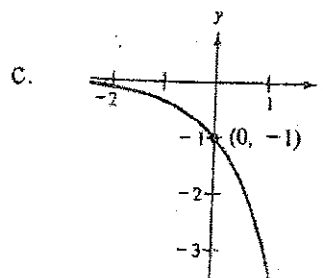
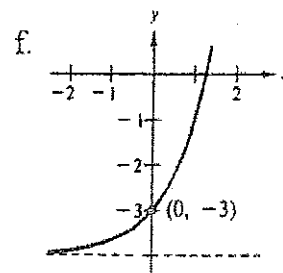
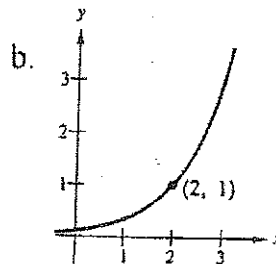
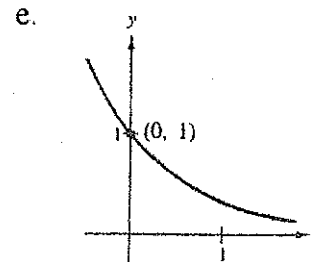
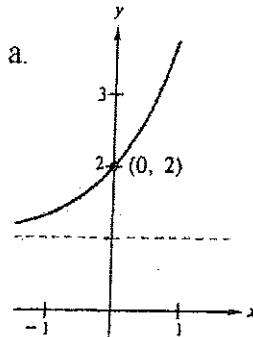
Number Match: _____

Letter Match: _____

$y = 3^{x-2}$

Number Match: _____

Letter Match: _____



1. $y = 3^x$ reflected over the x axis and shifted right two
2. $y = 3^x$ with no transformations
3. $y = 3^x$ reflected over the y-axis
4. $y = 3^x$ shifted up 1
5. $y = 3^x$ shifted right 2
6. $y = 3^x$ reflected over the x and y axis
7. $y = 3^x$ shifted down 4
8. $y = 3^x$ reflected over the x axis