

Name _____ Period _____

Score:

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HW 6-5 HONORS: Solve Systems using a Graphing Calculator

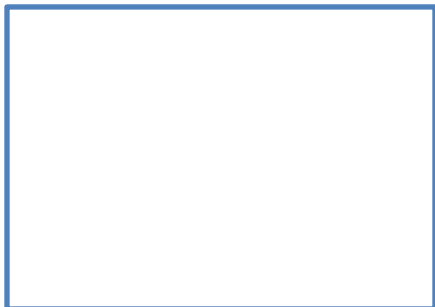
Example 1: Use a graphing calculator to determine the best window to view the solution to the system of equations. Draw a quick sketch of the system in a standard window and in the best window. (Make sure you draw your axes and label your min and max for each axis.)

a.

$$y = -\frac{1}{2}x + 9$$

$$y = -\frac{2}{3}x + 5$$

Standard Window:

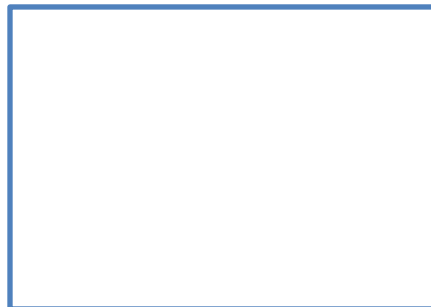


b.

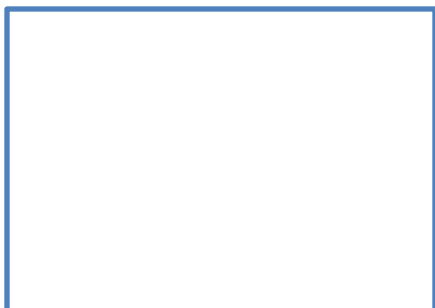
$$y = \left(\frac{1}{4}\right)^x$$

$$2x + 3y = 3$$

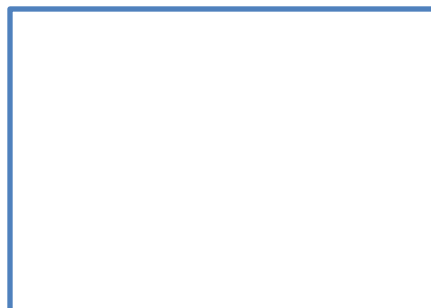
Standard Window:



Best Window:



Best Window:



Example 2: Use the two systems of equations above and your graphing calculator to solve the system. (Find the point(s) of intersection.) Write the solution below and label it on your graph above.

a.

b.

Part 1: Use a graphing calculator to determine the best window to view the solution to the system of equations. Draw a quick sketch of the system in the best window. (Make sure you draw your axes and label your min and max for each axis.)

Part 2: Use a graphing calculator to solve the system. Write the solution on your graph.

1.
 $f(x) = -3x + 6$
 $g(x) = 2x - 10$



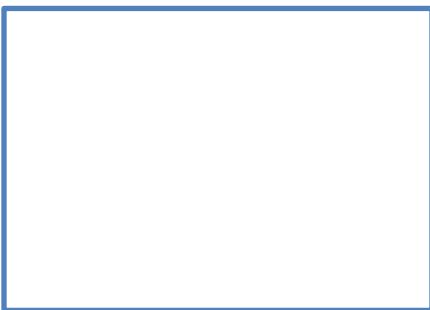
2.
 $f(x) = -25x$
 $g(x) = 50x - 120$



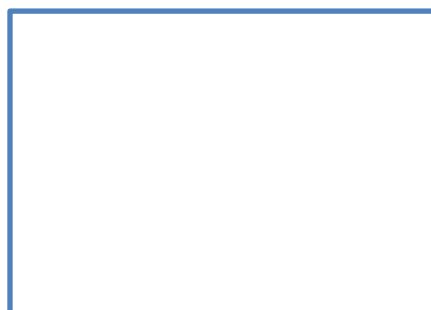
3.
 $-x + 3y = 12$
 $5x - 7y = 42$



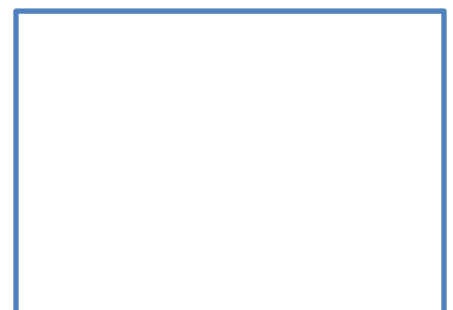
4.
 $f(x) = 5x + 4$
 $g(x) = 4^x$



5.
 $f(x) = -6x + 2$
 $g(x) = \left(\frac{1}{2}\right)^{x+2}$



6.
 $-24x + 10y = 90$
 $y = 6^x + 10$



Part 1: Use a graphing calculator to determine the best window to view the solution to the system of equations. Draw a quick sketch of the system in the best window. (Make sure you draw your axes and label your min and max for each axis.)

Part 2: Use a graphing calculator to solve the system. Write the solution on your graph.

7.

$$f(x) = 5^x - 3$$

$$g(x) = 2^{x-3} + 2$$



8.

$$f(x) = 5\left(\frac{1}{4}\right)^x - 1$$

$$g(x) = 2\left(\frac{1}{3}\right)^x$$



9.

$$f(x) = 2^x$$

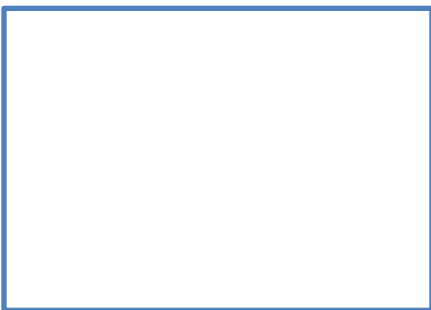
$$g(x) = -2^x + 3$$



10.

$$f(x) = 7^x + 4$$

$$g(x) = 7^x$$



11.

$$f(x) = \left(\frac{1}{3}\right)^x$$

$$g(x) = -x - 7$$

