Calculator Day Section 6.6 page 339 # 47-53 odd, 59, 61 Name_____

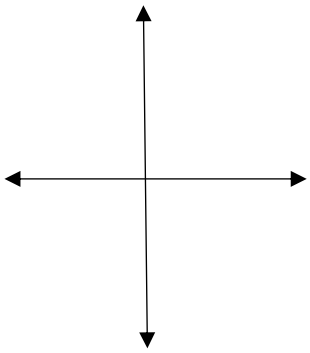
Use the graphing calculator to help you solve each inequality. You must set-up the system of equations needed first: $y_1 =$ and $y_2 =$. Then you must sketch what you expect the graph of the system of $y_1 =$ and $y_2 =$ to look like prior to using the calculator. (Round answers to 3 decimal places).

47. Solve: $9^x < 54$

$y_1 =$

$y_2 =$

Sketch the graph below:



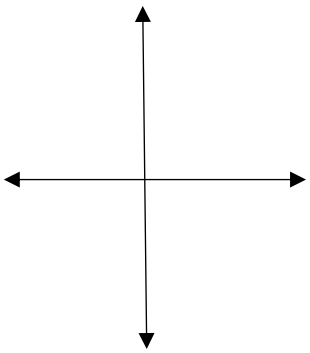
Solution:

49. Solve: $\ln x \geq 3$

$y_1 =$

$y_2 =$

Sketch the graph below:



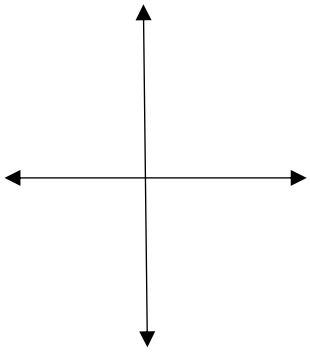
Solution:

51. Solve: $3^{4x-5} < 8$

$y_1 =$

$y_2 =$

Sketch the graph below:



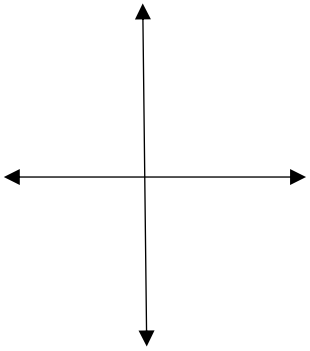
Solution:

53. Solve: $-3\log_5 x + 6 \leq 9$

$y_1 =$

$y_2 =$

Sketch the graph below:



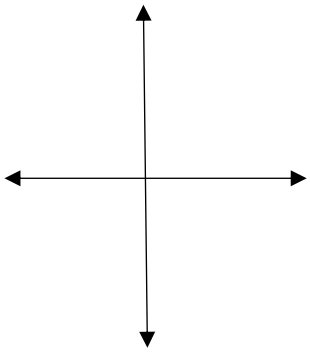
Solution:

59. Solve: $\ln(2x) = 3^{-x+2}$

$y_1 =$

$y_2 =$

Sketch the graph below:



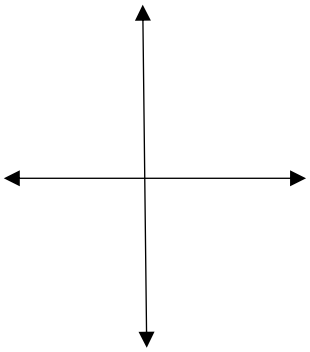
Solution:

61. Solve: $\log x = 3^{x-3}$

$y_1 =$

$y_2 =$

Sketch the graph below:



Solution: