

## Graphing Calculator Worksheet

1.) Use your graphing calculator to do the following for  $f(x) = \frac{3}{4}x - 15$ :

- a.) Graph  $f(x)$  on your calculator and determine a viewing window that will show both the x-intercept and the y-intercept.  $\left[ \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}} \right]$  by  $\left[ \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}} \right]$   
[ x-min , x-max , x-scale ] by [ y-min , y-max , y-scale ]
- b.) Using your graphing calculator, determine the x-intercept. \_\_\_\_\_  
(2<sup>nd</sup> calc, zero, left bound, right bound, guess)
- c.) Using your graphing calculator, determine the y-intercept. \_\_\_\_\_  
(2<sup>nd</sup> table, look at  $x = 0$  and determine the y-value)
- d.) Calculate the value of  $f(6)$  using your graphing calculator. \_\_\_\_\_  
(2<sup>nd</sup> calc, value,  $x = 6$  enter)

2.) Use your graphing calculator to do the following for  $f(x) = \sqrt{7-x} + 18$ :

- a.) Graph  $f(x)$  on your calculator and determine a viewing window that will show both the entire graph.  
 $\left[ \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}} \right]$  by  $\left[ \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}} \right]$
- b.) Using your graphing calculator, determine the y-intercept. \_\_\_\_\_  
Round to two decimal places.
- c.) Calculate the value of  $f(2)$  using your graphing calculator. \_\_\_\_\_  
Round to two decimal places.

3.) Use your graphing calculator to do the following for  $f(x) = \frac{x-4}{x+8}$ :

- a.) Graph  $f(x)$  on your calculator and determine a viewing window that will show the entire graph.  
 $\left[ \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}} \right]$  by  $\left[ \underline{\hspace{1cm}}, \underline{\hspace{1cm}}, \underline{\hspace{1cm}} \right]$
- b.) Using your graphing calculator, determine the x-intercept. \_\_\_\_\_
- c.) Using your graphing calculator, determine the y-intercept. \_\_\_\_\_
- d.) Calculate the value of  $f(-8)$  using your graphing calculator. \_\_\_\_\_  
Why are we not getting a number on the calculator?

- 4.) Use your graphing calculator to do the following for  $f(x) = -x^2 + 5x + 7$ :
- Graph  $f(x)$  on your calculator and determine a viewing window that will show the entire graph.  
 [ \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ] by [ \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ]
  - Using your graphing calculator, determine the x-intercepts. \_\_\_\_\_  
 (Round to two decimal places.)
  - Using your graphing calculator, determine the y-intercept. \_\_\_\_\_
  - Calculate the maximum point using your graphing calculator. \_\_\_\_\_  
 (2<sup>nd</sup> calc, maximum, left bound, right bound, guess) Round to two decimal places.

- 5.) Use your graphing calculator to do the following for  $f(x) = |3x - 7| - 18$ :
- Graph  $f(x)$  on your calculator and determine a viewing window that will show the entire graph.  
 [ \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ] by [ \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_ ]
  - Using your graphing calculator, determine the x-intercepts. \_\_\_\_\_  
 (Round to two decimal places.)
  - Using your graphing calculator, determine the y-intercept. \_\_\_\_\_
  - Calculate the minimum point using your graphing calculator. \_\_\_\_\_  
 (2<sup>nd</sup> calc, minimum, left bound, right bound, guess) Round to two decimal places.

6.) Solve the following equations using either the zero method or the intersect method.

a.)  $3x^2 = 12 - 7x$       b.)  $|5x + 8| - 27 = 0$       c.)  $\sqrt[4]{x+7} - 2 = 0$       d.)  $x^3 + 6 = 5x^2$