

Activity 1 - Find the Intersection of Two Graphed Functions

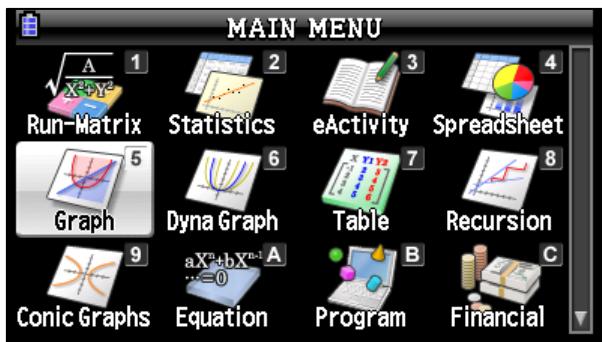
$$Y_1 = 3x^2 - 2x - 4$$

$$Y_2 = -3x + 1$$

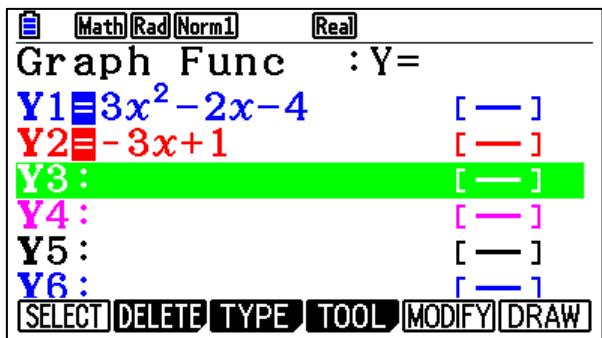
Domain: [-10, 10] and Range: [-10, 10]

CASIO (PRIZM)

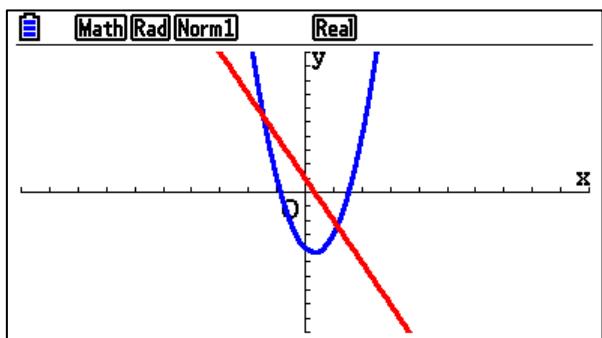
1. From Main Menu (**MENU**), select **GRAPH** icon by pressing **5**.



2. Enter functions to be graphed. Press **EXE** to store each function.

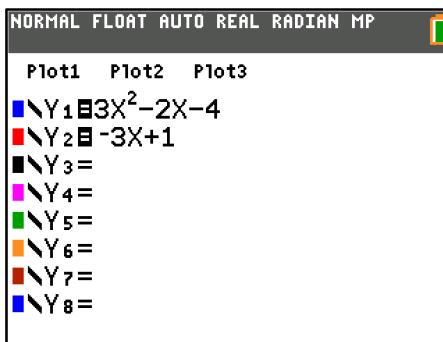


3. Press **F6** (DRAW) to view the graph of the functions.

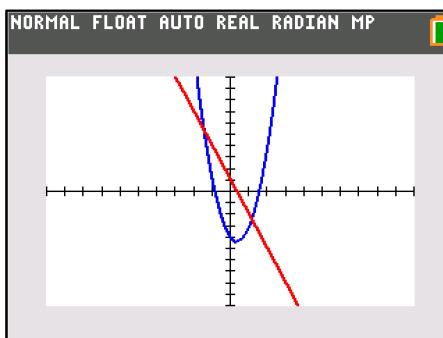


TEXAS INSTRUMENTS (84 PLUS CE)

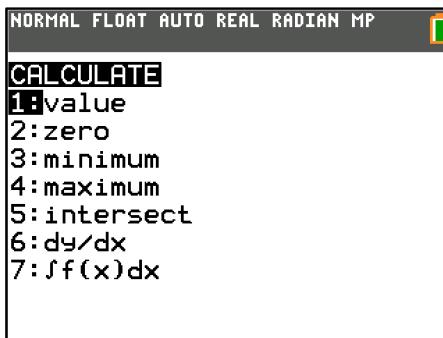
1. Press the **Y=** button and enter the functions to be graphed.



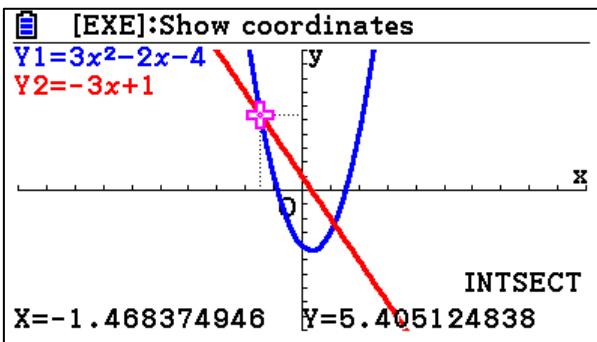
2. Press **[graph]** to view the graph of the functions.



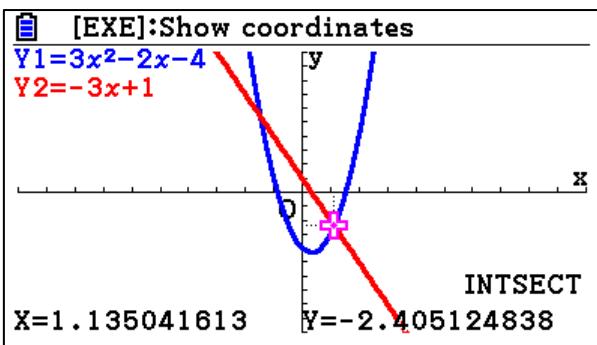
3. Press **2nd trace** (calc).



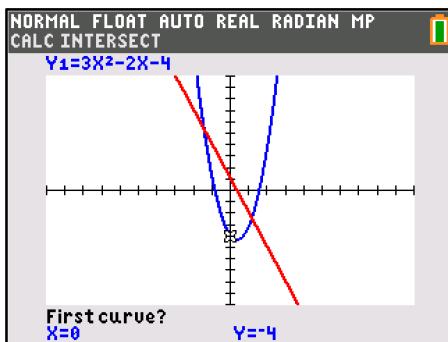
4. Press **F5** (G-Solv) **F5** (INTSECT) to find the intersection of the functions. The left-most intersection is displayed first.



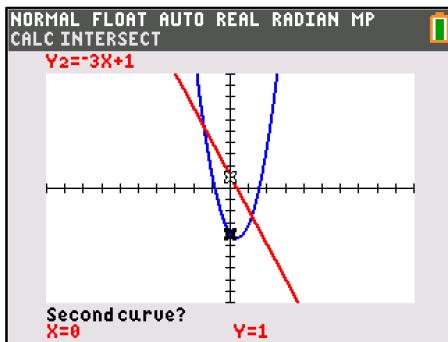
5. Press **▶** to go to next intersection. Use **ARROW KEYS** to toggle between all intersection points.



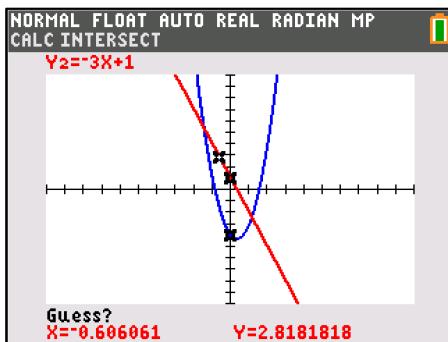
4. Press **5** (intersect) or arrow down to **5** and press **ENTER**.



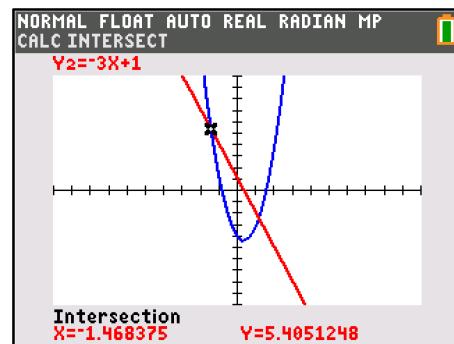
5. Choose the first function (highlighted on the screen) by pressing **ENTER**.



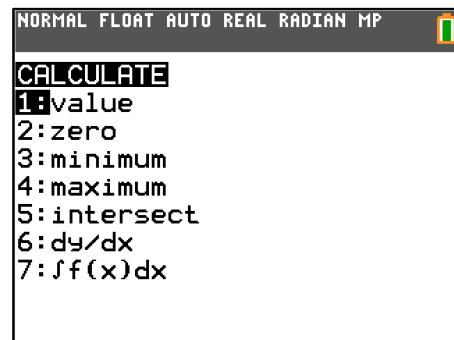
6. Choose the second function (highlighted on screen) by pressing **ENTER**.



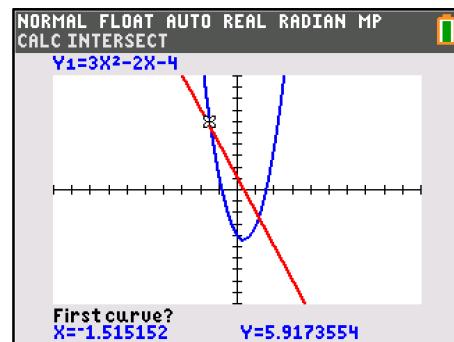
7. Use the arrow keys (\blacktriangleleft \triangleright) to move the cursor toward the desired intersection to make a **GUESS** and press **ENTER**. The intersection will display.



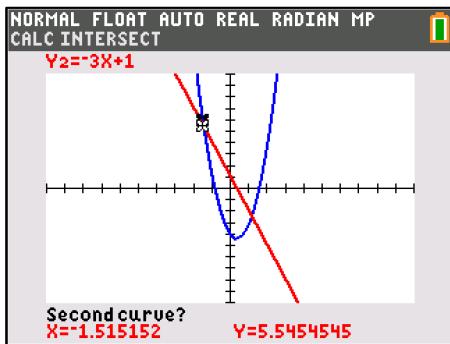
8. To find the next intersection point, repeat Steps 3 – 7. Press **2nd** **trace** (calc).



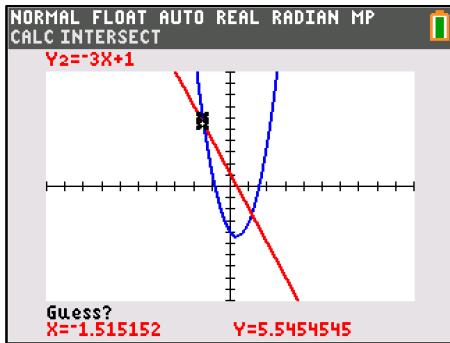
9. Press **5** (intersect).



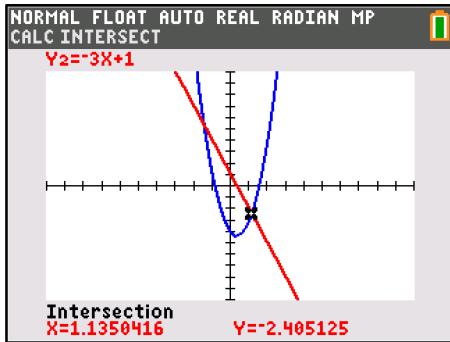
10. Choose the first function by pressing **enter**.



11. Choose the second function by pressing **enter**.



12. Use the arrow keys ($\leftarrow \rightarrow$) to move the cursor to the next desired intersection point and press **ENTER** to guess.



13. Repeat Steps 3 - 7 again to find more intersection points or see previous ones.