

Activity 7 - Find the Intersection of Two Graphed Functions

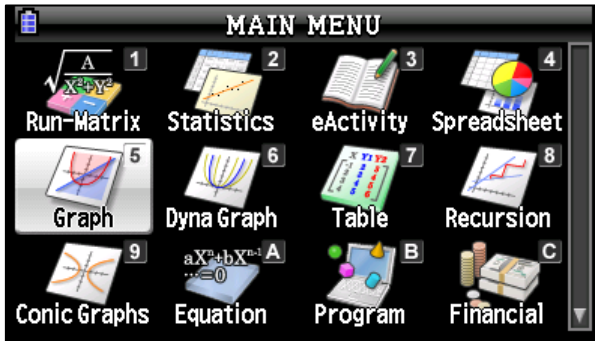
$$Y1 = 6\sin(x)$$

$$Y2 = 0.5x^2 + 2x - 2$$

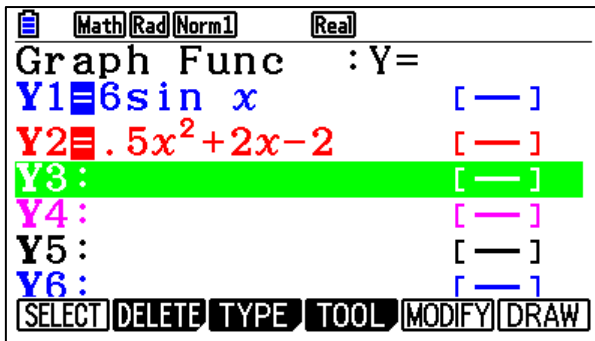
Domain: [-10, 10] and Range: [-10, 10]

CASIO (PRIZM)

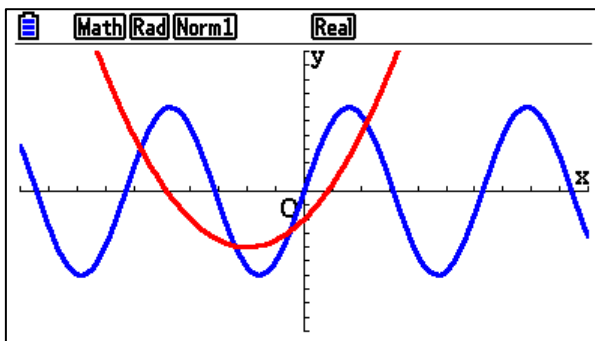
1. From Main Menu (**MENU**), select **GRAPH** icon by pressing **5**.



2. Enter functions to be graphed into **Y=** slots. Press **EXE** to store each function.

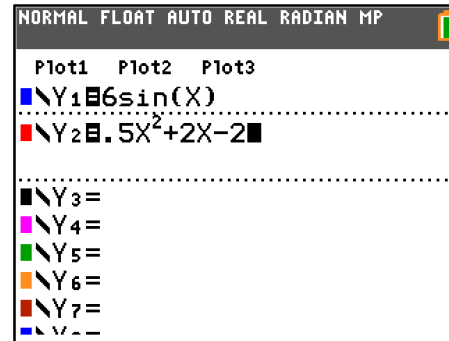


3. Press **F6** (DRAW) to view graph.

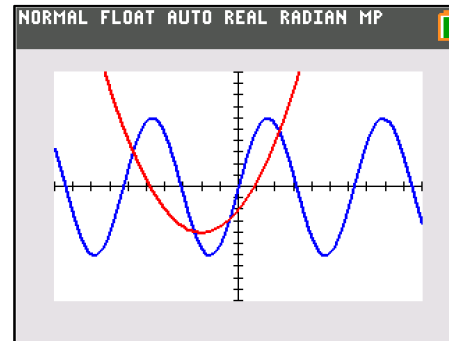


TEXAS INSTRUMENTS (84 PLUS CE)

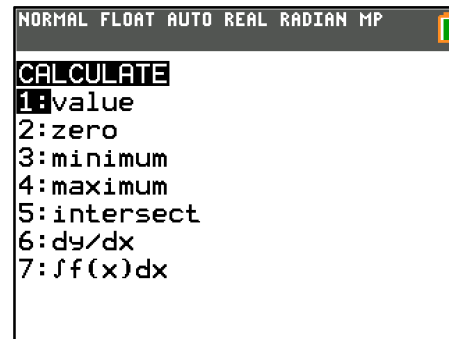
1. Press the **Y=** button and enter the functions to be graphed.



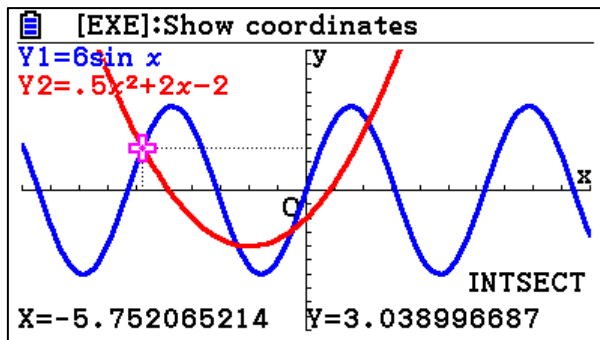
2. Press **GRAPH** to view the graph of the functions.



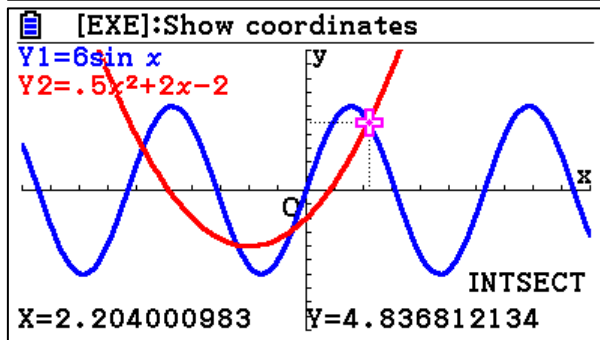
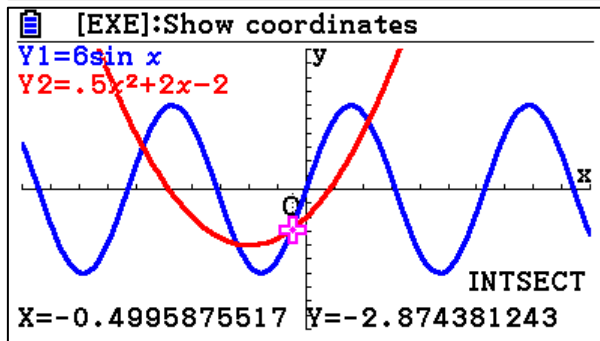
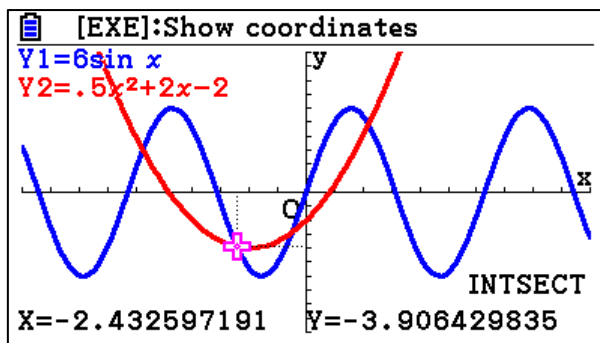
3. Press **2nd** **TRACE** (CALC).



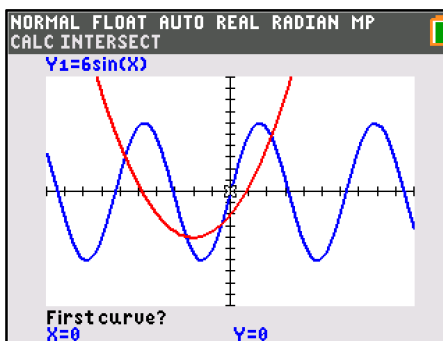
4. Press **F5** (G-Solv) **F5** (INTSECT) to find intersection. The left-most intersection is displayed first.



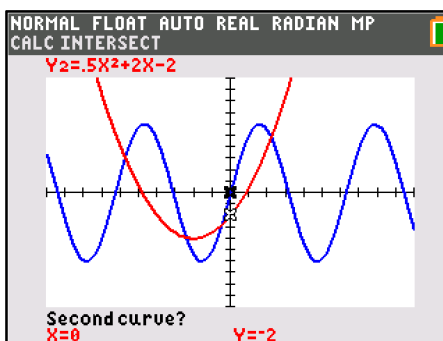
5. Press **▶** to go to next intersection. Use **ARROW KEYS** to toggle between all intersection points.



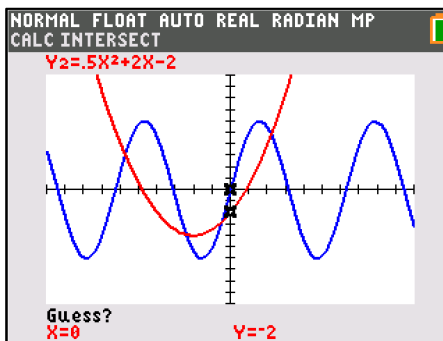
4. Press **5** (intersect) or arrow down to **5** and press **ENTER**.



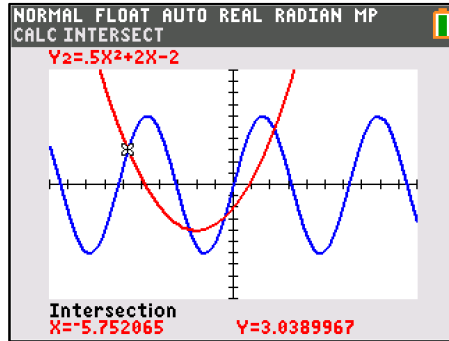
5. Choose the first function (highlighted on the screen) by pressing **ENTER**.



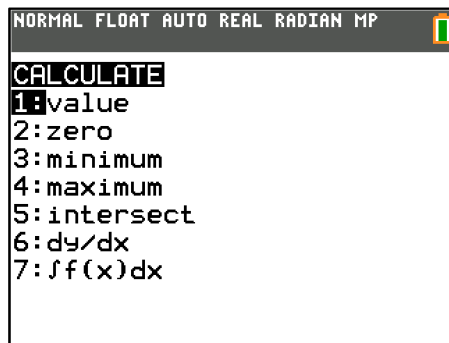
6. Choose the second function (highlighted on screen) by pressing **ENTER**.



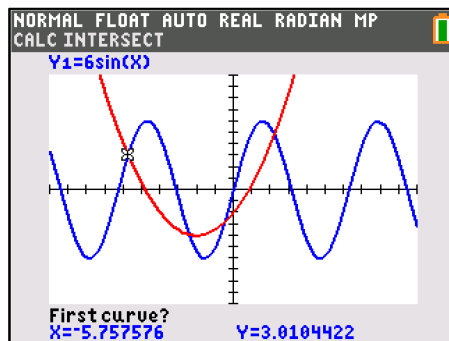
7. Use the arrow keys (\leftarrow \rightarrow) to move the cursor toward the desired intersection to make a **GUESS** and press ENTER . The intersection will display.



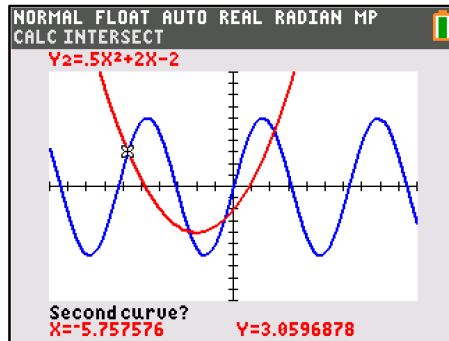
8. To find the next intersection point, repeat Steps 3 - 7. Press 2^{nd} TRACE (calc).



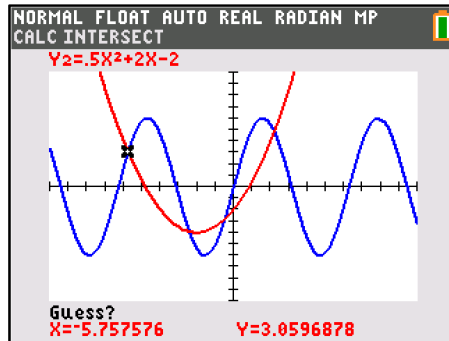
9. Press 5 (intersect).



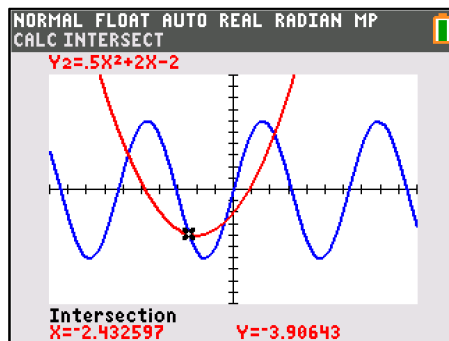
10. Choose the first function by pressing **ENTER**.



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



12. Use the arrow keys (**←** **→**) to move the cursor to the next desired intersection point and press **ENTER** to guess.



13. Continue to repeat Steps 3 - 7 to find all desired intersection points.

