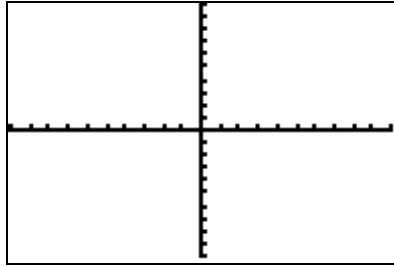


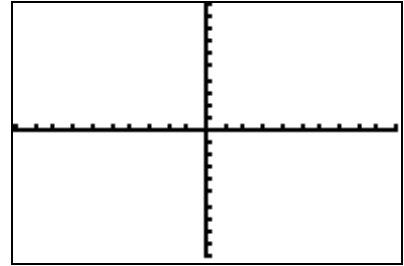
Graphing Calculator Activity

Part 1: Set your window to the standard window range by selecting **ZOOM** and then **6:ZStandard**. Graph each equation below on your calculator and draw a sketch:

a) $Y_1 = X$



b) $Y_2 = -X$



Compare graphs for Y_1 and Y_2 . Note any similarities and any differences:

Part 2:

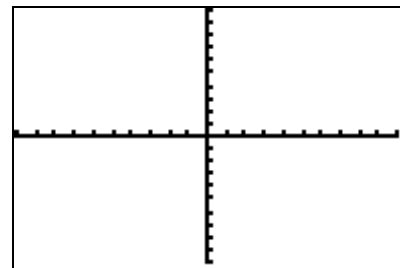
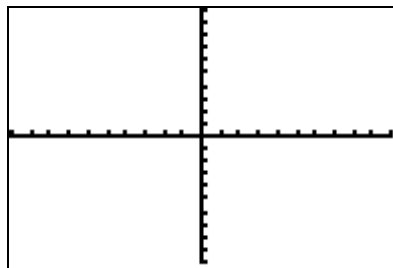
For each equation below:

1. Predict the graph of each equation by comparing it to the equations above for Y_1 and Y_2 and sketch your prediction.
2. Enter the equation on your graphing calculator and sketch this graph.
3. Compare your predicted graph and actual graph. How did you do?

Prediction

Graph from calculator

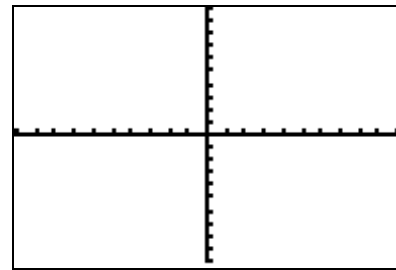
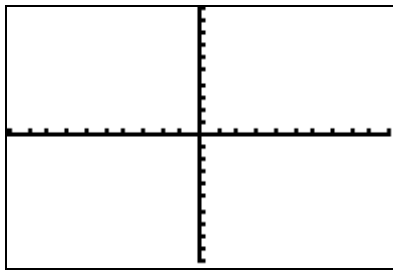
1. $y = x + 1$



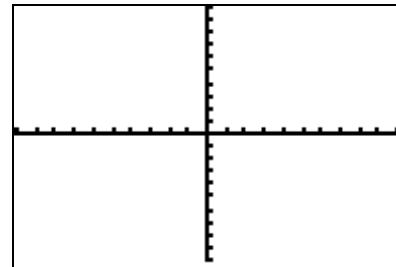
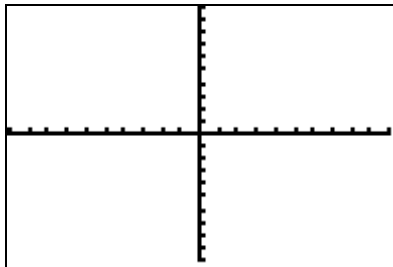
Prediction

Graph from calculator

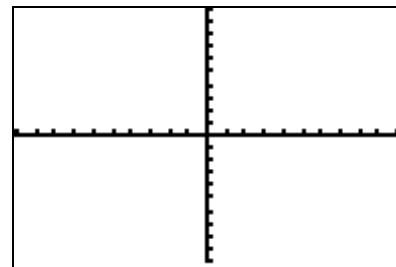
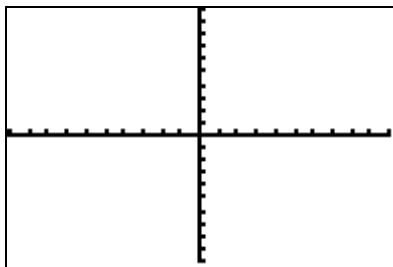
2. $y = x - 3$



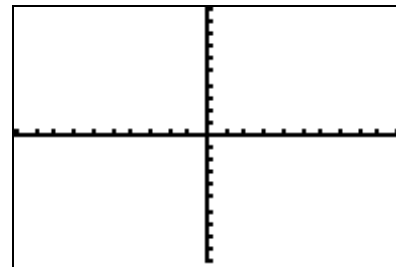
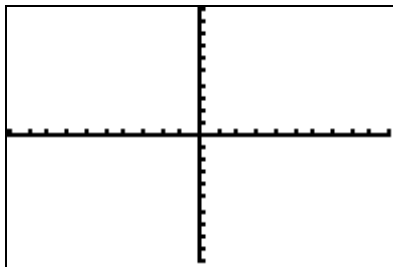
3. $y = -x + 1$



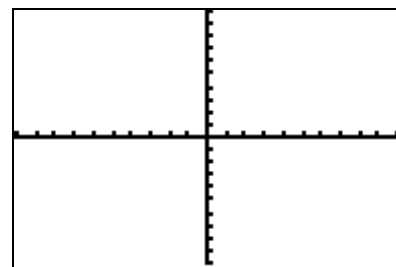
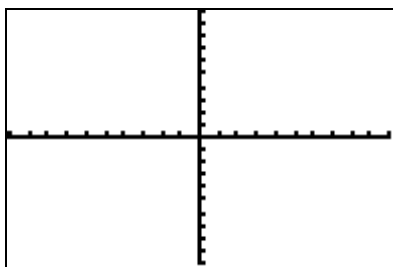
4. $y = -x + 4$



5. $y = -x - 4$



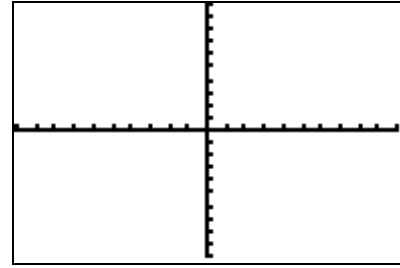
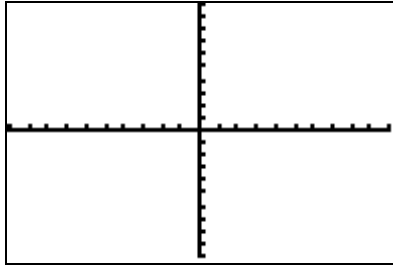
6. $y = 2x$



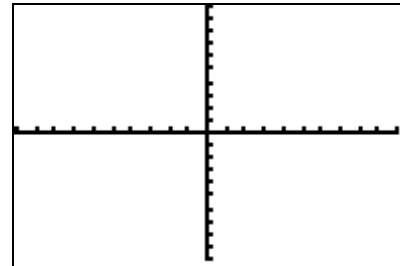
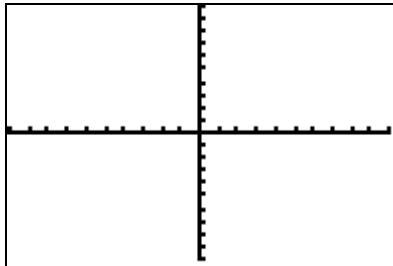
Prediction

Graph from calculator

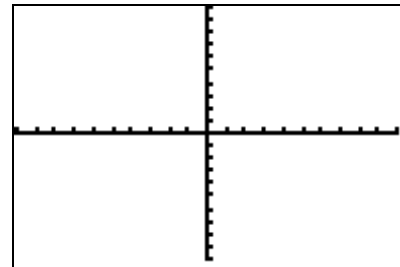
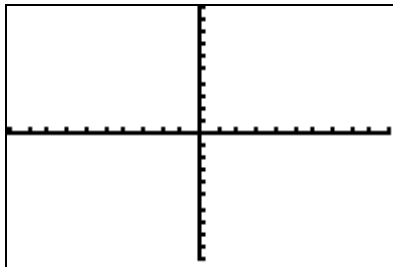
7. $y = 2x + 3$



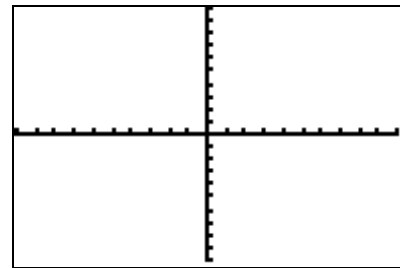
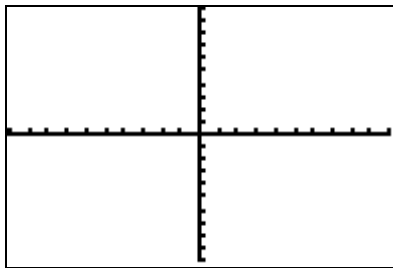
8. $y = 2x - 4$



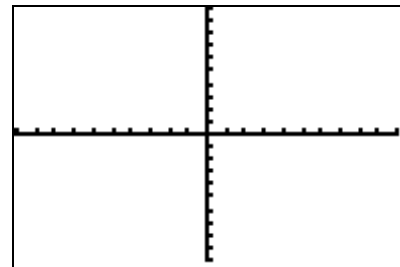
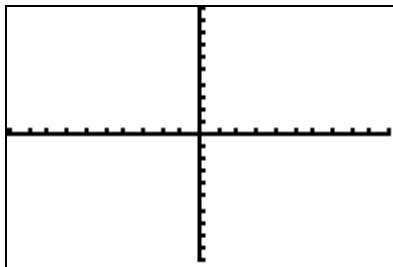
9. $y = -2x$



10. $y = -2x - 5$



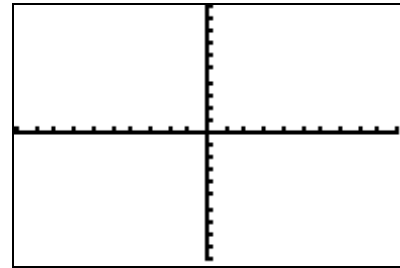
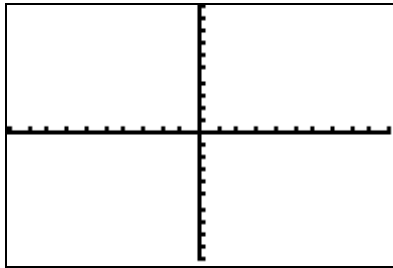
11. $y = -2x + 3$



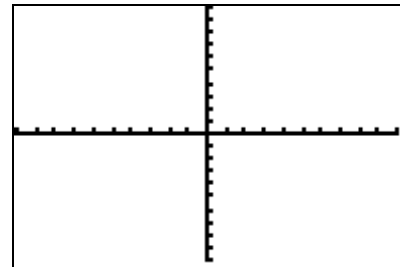
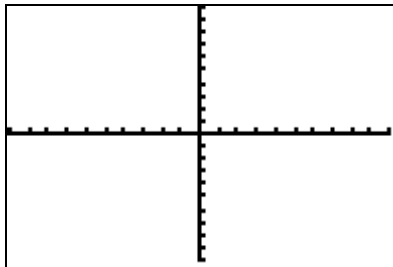
Prediction

Graph from calculator

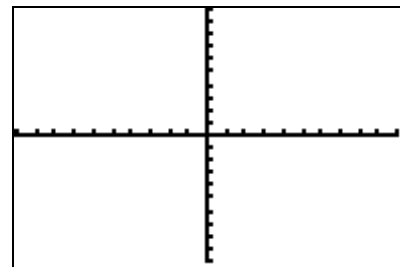
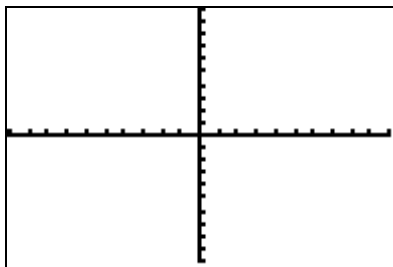
12. $y = 3x$



13. $y = 3x - 4$



14. $y = -3x + 3$



Part 3: Thought

In the form $y = mx + b$, describe what happens when you:

Change the value of m : _____

Change the value of b : _____
