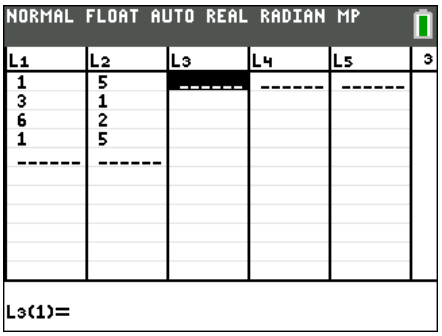
Part 1 – Move Those *x*'s

Press [STAT] and select **1:Edit…** to enter the numbers shown at the right. Use the arrow keys to move from one list to another.

List L1 represents the *x*-values.

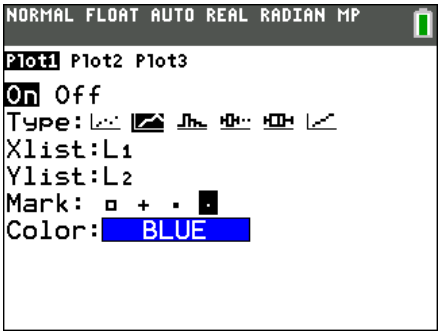
List L2 represents the *y*-values.



Press [2nd] [STAT PLOT] and select **Plot1**. Match the settings as shown at the right.

Press [ZOOM] and select **ZStandard** to view the graph.

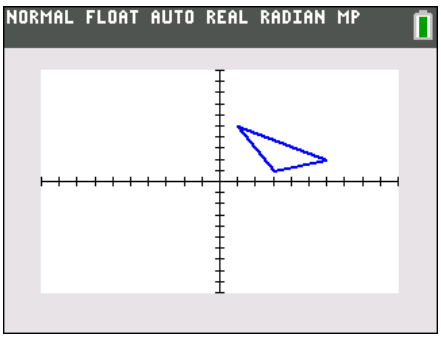
Press [2nd] [STAT PLOT] again and select **Plot2**. Use the same settings as Plot1, but for **Xlist** select L3 and for **Ylist** select L4 and leave the Color in **Plot2 RED**.



Press [2nd] [QUIT] to return to the home screen. For Exercises 1 and 2, enter both expressions and then press [GRAPH]. Sketch the graph. To enter the arrow, press [STO▸]. **Note:** To enter the names of the lists (L1, L2, L3, L4), press [2nd] [LIST] and select the appropriate name.

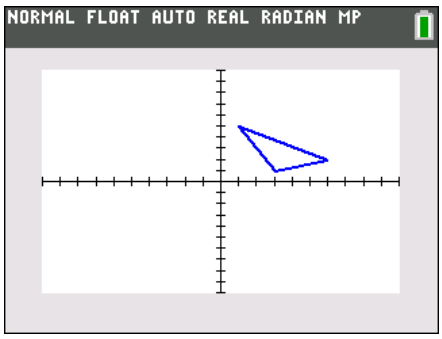
1. L1 + 3 → L3

L2 → L4



2. L1 – 3 → L3

L2 → L4



3. How did the *x*-values change? _____

_____

4. How did the triangle move? _____

_____

5. What happens when a number is added to or subtracted from the *x*-values of a figure?

_____

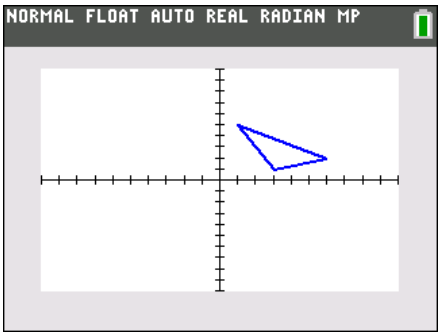
_____

Part 2 – Move Those *y*'s

Return to the home screen. For Exercises 6 and 7, enter both expressions and then press GRAPH. Sketch the graph.

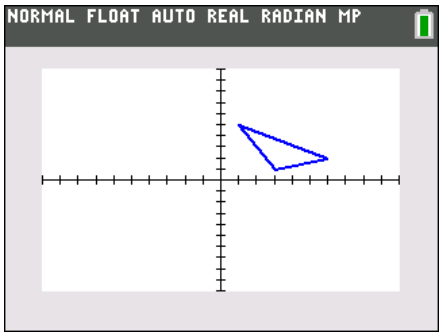
6. L1 → L3

L2 + 5 → L4



7. L1 → L3

L2 – 5 → L4



8. How did the *y*-values change? _____

9. How did the triangle move? _____

10. What happens when a number is added to or subtracted from the *y*-values of a figure?

_____

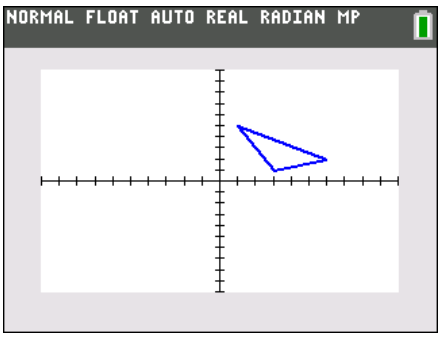
_____

Part 3 – Change That Shape

Return to the home screen. For Exercises 11 and 12, enter both expressions and then press GRAPH. Sketch the graph.

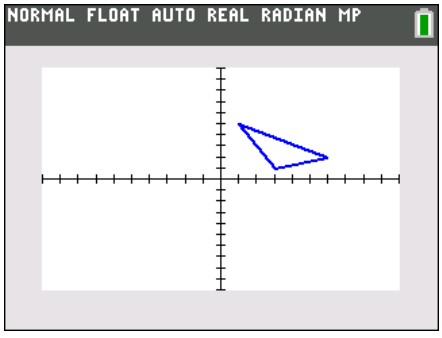
11. 2 ∗ L1 → L3

2 ∗ L2 → L4



12. $\frac{1}{2}$ ∗ L1 → L3

$\frac{1}{2}$ ∗ L2 → L4



13. How did the *x*-values and the *y*-values change? _____

_____

14. How did the triangle change? _____

_____

15. What happens when a number between 0 and 1 or greater than 1 is multiplied by the *x*- and *y*-values of a figure? _____

_____