Geometry and the TI-Navigator: Transformations Part 3, Translations

Materials:
Student Worksheet
TI-73 or TI-84+ Graphing Calculator
TI-Navigator System

Instructions:

1. Open Navigator and Start Class.
2. Open Activity Center and load Trans.act Activity Settings.
3. Start Activity.
4. Pass out student worksheet.
5. Have students log on to NavNet and enter Activity Center.
6. Have students form the letter "F" in the first quadrant.
    - Do not allow students to share coordinates.
7. Have each student mark his/her point by pressing the soft key for MARK on his/her calculator.
8. Stop the activity (DO NOT CLEAR ACTIVITY DATA during entire activity).
9. Have students sketch the graph and record their point on the worksheet.
10. Instruct students to rewrite their ordered pair by subtracting 7 from the original x-coordinate and leaving the original y-coordinate the same.
11. Restart the Activity.
12. Have students move to their new point and mark it.
13. Stop the activity and discuss.
14. Have students sketch the graph and record their point on the worksheet.
15. Instruct students to rewrite the original ordered pair by subtracting 10 from the original x-coordinate and subtracting 5 from the original y-coordinate.
16. Have students record what they think will happen.
17. Restart the Activity.
18. Have students move to their new point and mark it.
19. Stop the activity and discuss.
20. Have students sketch the graph and record their point on the worksheet.
21. Instruct students to rewrite their ordered pair by leaving the original x-coordinate the same and subtracting 8 from the original y-coordinate.
22. Have students record what they think will happen.
23. Restart the Activity.
24. Have students move to their new point and mark it.
25. Stop the activity and discuss.

Student Worksheet Name_____

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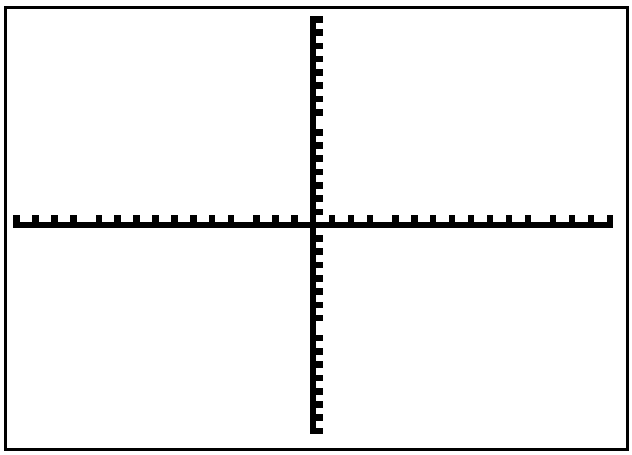
Log in to NavNet. Enter Activity Center. You will be forming the letter "F" in the first quadrant of the coordinate plane on your calculator. **DO NOT SHARE A POINT WITH ANYONE!!**

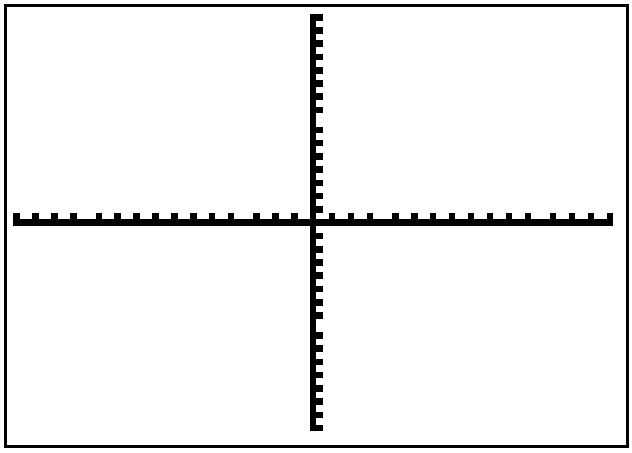
Sketch the graph



What is your coordinate? _____

Rewrite your ordered pair by subtracting 7 from the original x-coordinate and leaving the original y-coordinate the same. _____

Sketch the graph



What was your original coordinate?_____

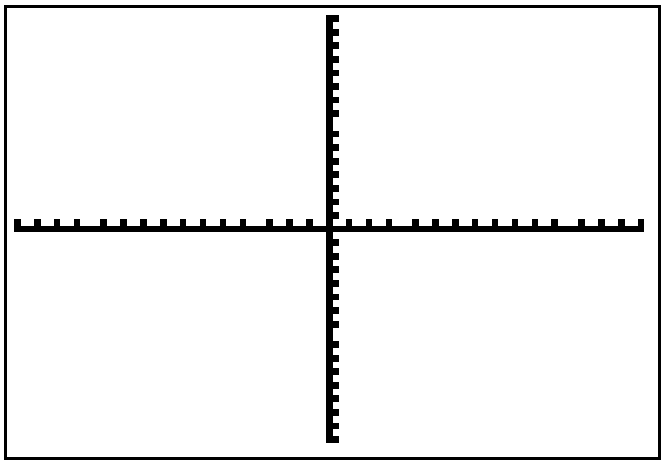
What is your new coordinate? _____

What did this translation do? _____

Rewrite your ordered pair by subtracting 10 from the original x-coordinate and subtracting 5 from the original y-coordinate. _____

What do you think will happen to the graph? _____

Sketch the graph



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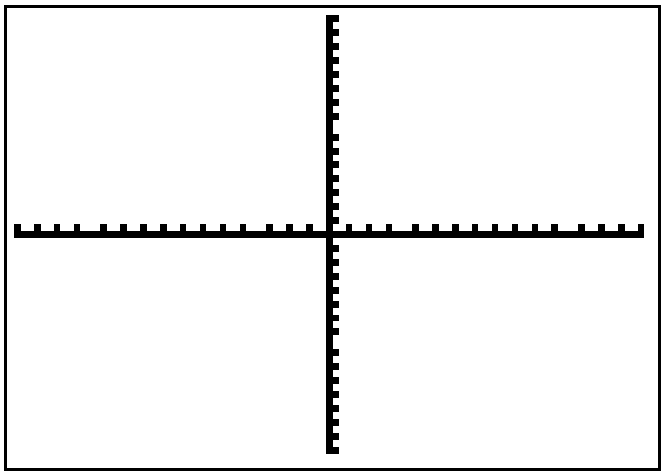
Rewrite your ordered pair by leaving the original x-coordinate the same and subtracting 8 from the original y-coordinate. _____

What do you think will happen to the graph? _____

Sketch the graph



What was your original coordinate?_____

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What did this translation do? _____