Hide and Seek on the Coordinate Plane

Summary

The activity is designed as an introduction to the activity center on navigator. Prior to the activity students should have covered graphing points on the coordinate plane, adding, subtracting, multiplying and dividing integers, as well as absolute value and comparing and ordering integers.

Teacher Notes

1. Have the students log in to the navigator system.
2. Have students go to the activity center.
3. Explain to students that once the activity is started you will give them several minutes to move about the coordinate plane to find their cursor color and shape. You may want to give them 5 minutes or so just to play around with it to get use to the controls.
4. Pause the activity and tell the students you will be giving them clues and it will be their job to find you based on the clues. They will need to move their cursor to the appropriate place on the graph and then stop. Tell them they will have about one minute to find the point, the line or the quadrant on the graph that will meet the conditions.
5. After you have given the clues start the activity center again to allow them time to find where you are at.
6. After about a minute pause the activity and have the students check to see if they are in the right place.

Below you will find a list of questions to get you started.

1. I am in the area of the graph where both coordinates are positive.
2. I am in the area of the graph where both coordinates are negative.
3. I am in the area of the graph where my x-coordinate is positive and my y-coordinate is negative.
4. I am in the area of the graph where my x-coordinate is negative and my y-coordinate is positive.
5. I am on the line where my x-coordinate is always 0.
6. I am on the line where my y-coordinate is always 0.
7. I am on the line where my x-coordinate is the opposite of my y-coordinate.
8. I am on the line where my x-coordinate equals my y-coordinate.
9. I am on the line where my y-coordinate is twice my x-coordinate.
10. I am on the line where my x –coordinate is always 3.
11. I am on the line where my y-coordinate is always -4.
12. I am at the point if you multiply by coordinates together you get -36 but the absolute value of my y-coordinate is greater than the absolute value of my x-coordinate.
13. I am at the point if you add my coordinates you will get -10 and multiply them you get 24.
14. I am at the point if you divide my y-coordinate by my x-coordinate you will get -3 and if you subtract my x-coordinate from my y-coordinate you get 12.
15. I am at the point if you multiply my coordinates together you get 21 and if you add them you get 10, but my y-coordinate is greater than my x-coordinate.
16. I am at the point where the absolute value of each coordinate is 9 but if you add the coordinates together you get 0. Also if you subtract the y-coordinate from the x-coordinate you get -18.
17. I am at the point whose sum of the coordinates is 1 and whose produce it -56.