**Down The Rabbit Hole**

Okay. So now you know how to find the midpoint of a segment, but can you find the midpoint of the MIDPOINT of a segment? Yes you can. Here’s the story: A is the midpoint of segment .

B is at point (-10, 10) and N is at point (8, -8).

**Use the graph on the back for each of these problems!**

1. Draw segment. Find the coordinates of point A. Label it on the graph.
2. R is the midpoint of . How could you find the coordinates of that point? Write your strategy in the space below.
3. Find the coordinates of R ( , ) and label it on the graph.
4. What fraction of is \_\_\_\_\_\_\_ How do you know?
5. I is the midpoint of . Find the coordinates of I ( \_ , )and label it on the graph.
6. What fraction of is \_\_\_\_\_\_\_ How do you know?
7. H is the midpoint of . Find the coordinates of H ( \_ , )and label it on the graph.
8. What fraction of is \_\_\_\_\_\_\_ How do you know?
9. SUPER COOL AWESOME BONUS: A1 is the midpoint of . Find A1 ( , ) and label it on the graph. What fraction of is \_\_\_\_\_\_\_ How do you know?
10. SUPER COOL AWESOME BONUS 2: What does your segment spell? What is that?
11. SUPER COOL AWESOME BONUS 3: What fraction of is ? Convince me.

