

Vector Dog Chase

Name \_\_\_\_\_

You get up in the morning and get ready for a run. You put on your GPS watch so you can see how well you are doing. You open the door and... your dog gets out!! You chase your dog all over town. He is running everywhere. You finally catch your dog after 2 hours and 48 minutes. You get home and notice that your GPS watch only recorded the distance and direction you ran, not your average speed. You decide (since you had such a GREAT physics teacher) to figure out your average speed. You also decide to graph where you ran.

**GPS data**

- 5 blocks E
- 3 blocks N
- 9 blocks W
- 1 blocks S
- 6 blocks N
- 2 blocks E
- 14 blocks N
- 10 blocks E
- 3 blocks S
- 3 blocks W
- 11 blocks N
- 7 blocks W
- 4 blocks S
- 4 blocks W
- 15 blocks S
- 20 blocks E
- 2 blocks N
- 10 blocks W
- 5 blocks S
- 15 blocks W
- 3 blocks N
- 2 blocks E
- 3 blocks N
- 1 block W
- 2 blocks S

1. Graph the data.
2. What is your average speed? (assume there is 13 blocks in a mile)  
Blocks per minute \_\_\_\_\_ Blocks per hour \_\_\_\_\_  
Miles per minute \_\_\_\_\_ Miles per hour \_\_\_\_\_
3. Suppose you knew where your dog was going to end up. How far would you have to run to meet him? (Give coordinates)  
\_\_\_\_ blocks N \_\_\_\_ blocks E \_\_\_\_ blocks S \_\_\_\_ blocks W