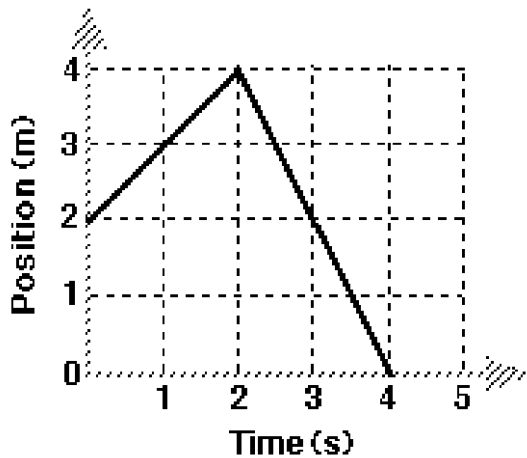


1. Explain the difference between distance traveled and displacement.

2. Explain the difference between speed and velocity.

3. While out trying to find water, Jack decides to take data of his position over time in order to keep track of where he has been. The data is shown in the graph below.



a. What is Jack's total distance traveled?

b. What is his displacement?

c. At what time is Jack back at his starting point?
What is his velocity at this point?

d. Describe, in complete sentences, Jack's motion during his search for water.

4. A cougar can run with a speed of 11 m/s. If the cougar runs for 15 seconds, what distance did it travel?

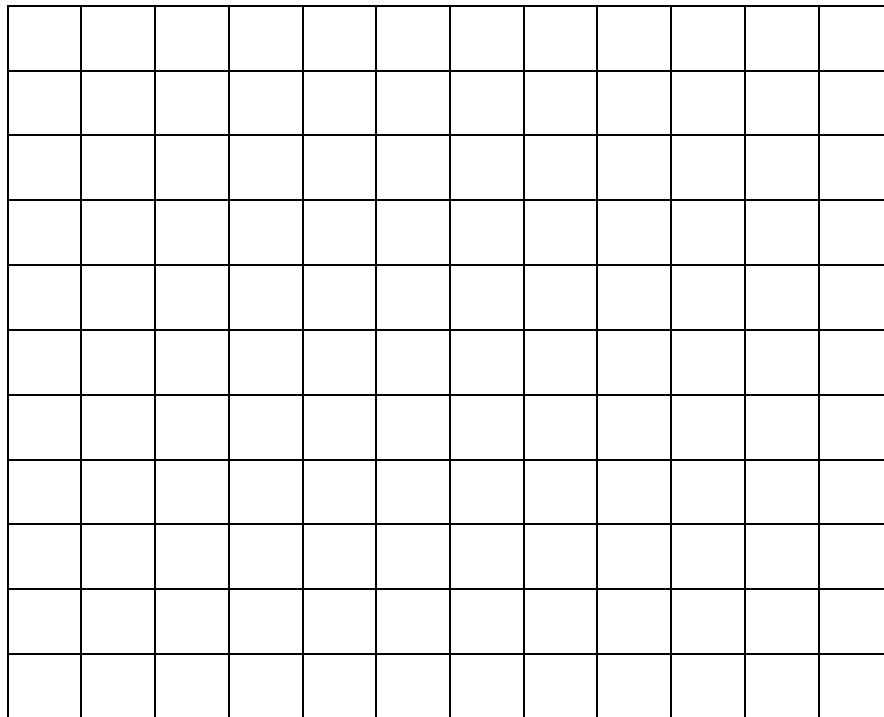
5. A ridiculous rhino runs at a constant speed. If the rhino can run 56 meters in 12 seconds, what is the rhino's speed?

6. From the data below, construct a graph of position vs. time using the space provided. Answer questions a-d using your graph.

Time (s)	Position (m)
0	0
1	2
2	4
3	4
4	7
5	10
6	10
7	10
8	5
9	0

a. During what time interval(s) is the velocity of the object zero?

b. What is the velocity of the object between $t=7s$ and $t=8s$? What is the speed of the object during this interval?



c. What is the object's displacement over the entire interval?

d. What is the total distance the object travels?