Name:

1. What is the speed of a truck that travels 10000 m in 400 seconds?
2. What distance is traveled by a police car that moves at a constant speed of $30 \mathrm{~m} / \mathrm{s}$ for 300 seconds?
3. What distance would be covered in 600 seconds by a train that travels at a constant speed of $50 \mathrm{~m} / \mathrm{s}$ ?
4. What is the average speed (in $\mathrm{km} / \mathrm{hr}$ ) of a commercial jet that travels from New York to Los Angeles $(4800 \mathrm{~km})$ in 6.00 hours?
5. Find the answer to $\# 4 \mathrm{in} \mathrm{m} / \mathrm{s}$. $(1000 \mathrm{~m}=1 \mathrm{~km}, 60 \mathrm{~min}=1 \mathrm{hr}, 60$ second $=1 \mathrm{~min})$
6. A car is traveling at an average speed of $70 \mathrm{~m} / \mathrm{s}$. How many m would the car travel in 3600 seconds?
7. A car moved 50 km to the North, 20 km to the South, and then 40 km to the North. What is its distance? What is its displacement?
8. A car moved 20 km East and 70 km West and then 20 km East. What is the distance? What is the displacement?
9. A car moved 20 m East and 60 m West in 20 seconds. What is its average speed? What is its average velocity?
10. How far will car travel in 9 seconds at $20 \mathrm{~m} / \mathrm{s}$ ?
11. A car moved 3 km East and 4 km North. What is the distance? What is its displacement?

## The below graph represents the position of a mouse at a given time.


12. Find the following:
a. Distance traveled:
b. Displacement:
c. Average speed:
d. Average velocity:
13. A car moved 60 km East and 90 km West. What is the distance? What is the displacement?
14. What is the average velocity of a car that moved 40 m East and 80 m West in 200 seconds? What was the average speed of the car?
15. How far will a car travel in 25 min at $12 \mathrm{~m} / \mathrm{s}$ ?

CHALLENGE PROBLEM: A rabbit and a turtle are practicing for their big race. The rabbit covers a $30 . \mathrm{m}$ practice course in 5.0 seconds, the turtle covers the same distance in 120 seconds. If the actual race is run on a 96 m course, by how many seconds will the rabbit beat the turtle?

