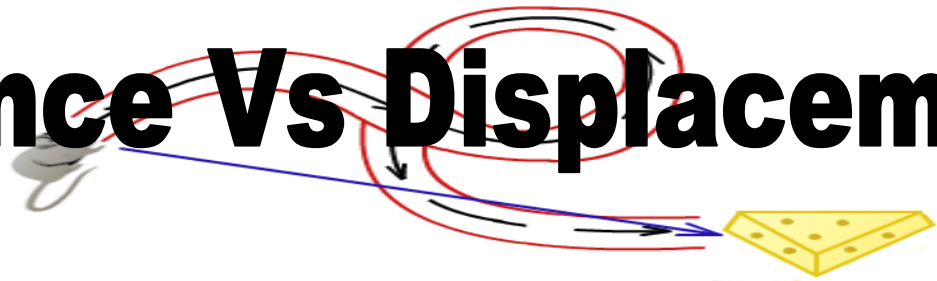


Distance Vs Displacement



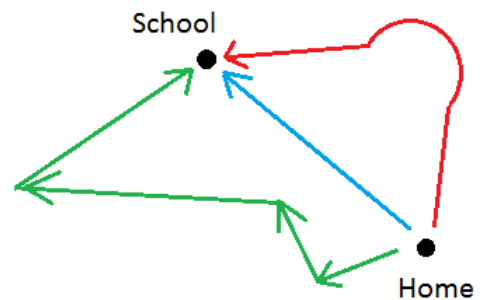
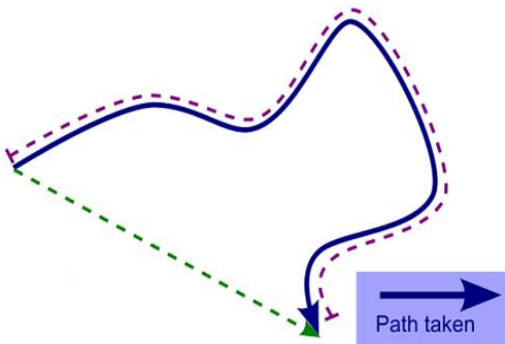
Distance:

- Distance is how _____ an object has moved.
- Its value _____ (can/ cannot) be zero.
- It _____ (depends/ doesn't depend) on direction.

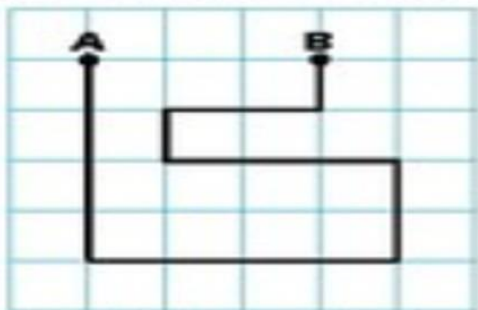
Displacement

- Displacement is how _____ an object has moved from its _____ position
- Its value _____ (can/ cannot) be zero.
- It _____ (depends/ doesn't depend) on direction.

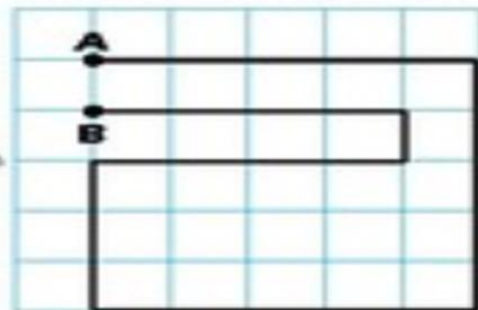
Label the below pictures to show **displacement and distance**.



> **INSTRUCTIONS:** Differentiate between distance and displacement for the wolf that started at point A and traveled as shown to point B.

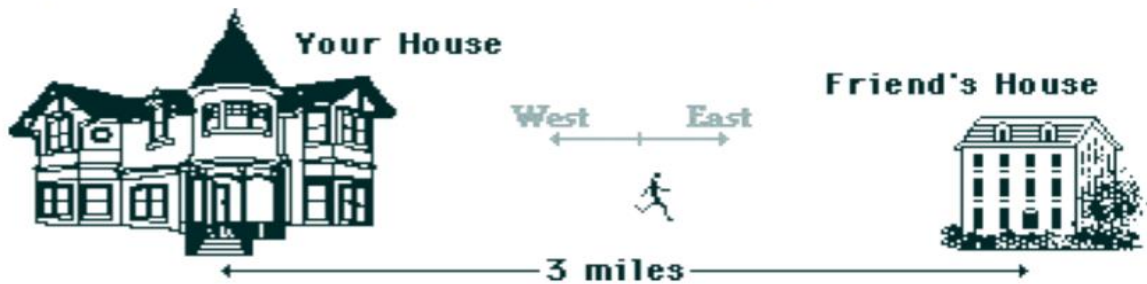


Distance: ____
Displacement: ____



Distance: ____
Displacement: ____

You run from your house to a friend's house that is 3 miles away. You then walk home.



- What distance did you travel? _____
- What was the displacement for the entire trip? _____

Speed and Velocity Practice

Identify if the following is Speed or Velocity.

Speed is a measure of how fast an object is moving or traveling. Velocity is a measure of how fast an object is traveling in a certain direction. Both speed and velocity include the distance traveled compared to the amount of time taken to cover this distance.

- 15m/s south _____
- 150mph _____
- A train traveling 60km in 10min _____
- A plane flew northeast at 250mph _____
- A beetle crawled 15cm/min up the tree _____

Determine the Speed or Velocity for the following.

1. What is the velocity of a car that travelled north 75km in 1.5 hours?
2. What is the speed of a bicyclist that travels 20 miles in 3.5 hours?
3. What is the velocity of an ant that travels southwest 300meters in .5 hours? _____