

Notes Chapter 1 Lesson 1

Position

Position

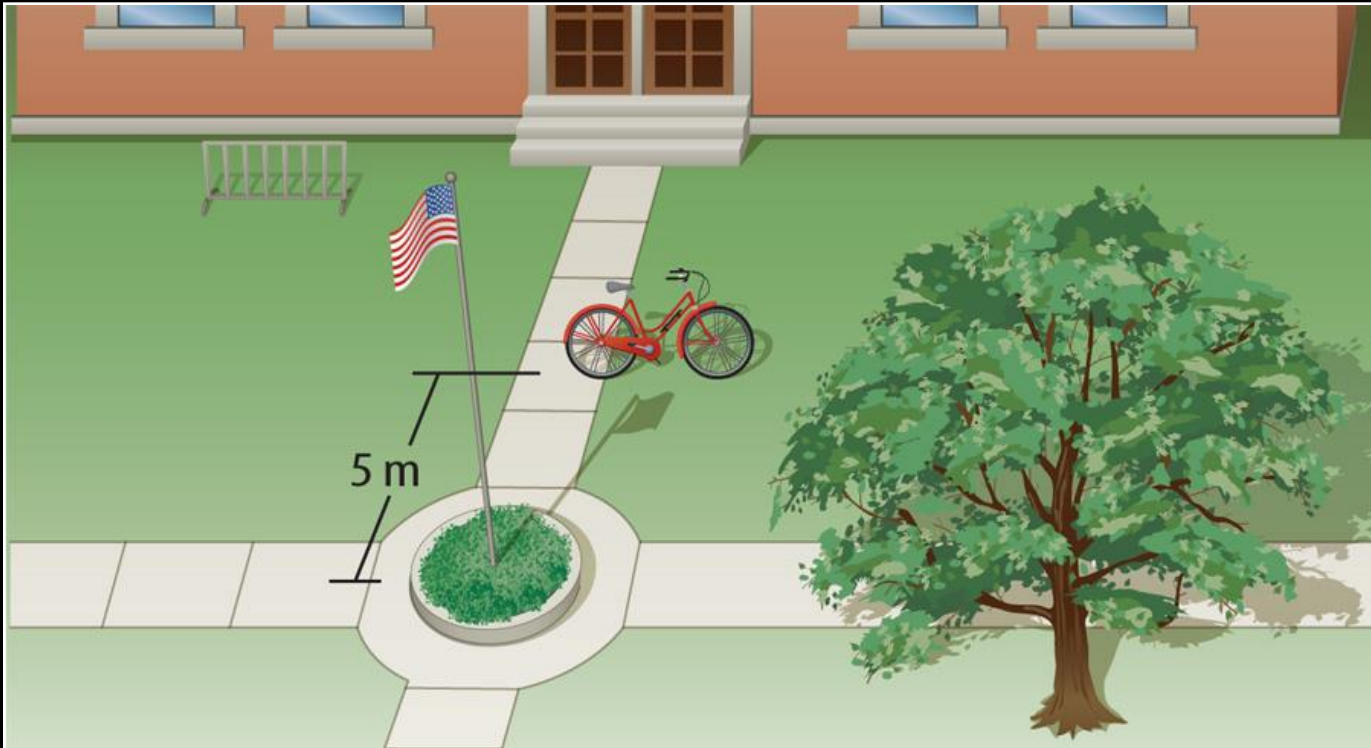
- Position is defined relative to a reference point and reference directions.

Position

- Three things must be included to determine position:
 - A **reference point**, or starting point used to describe the position of another object
 - A reference direction that describes which way to move in relation to the reference object
 - A distance from the reference point

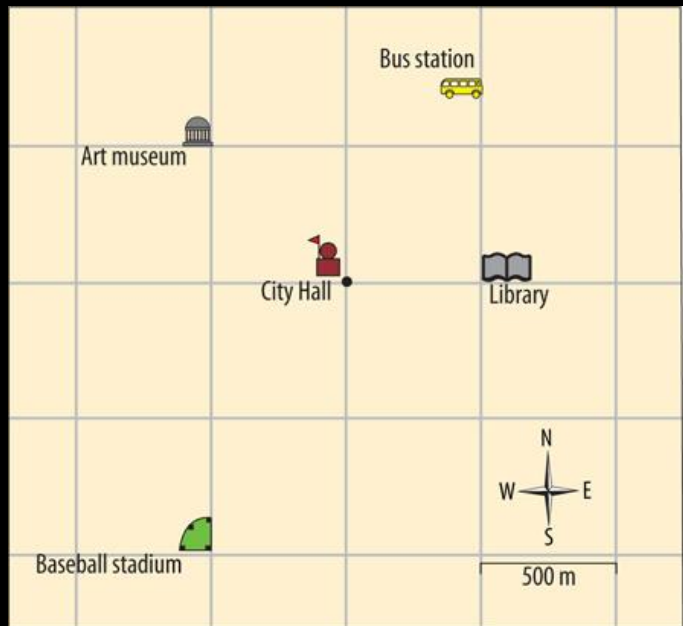
Position and Reference Points

- The flagpole can be used as a reference point for finding the bicycle.



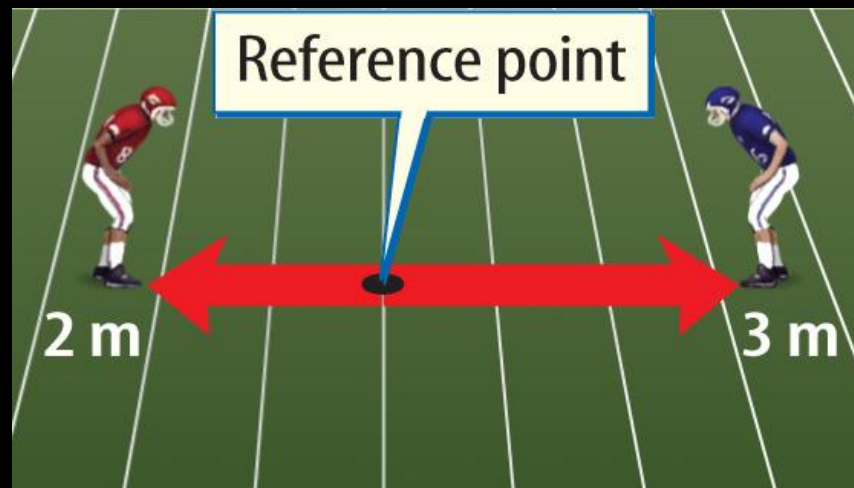
Position

- Lets try together!!!
- Puzzle



Position as a Vector

- A **vector** is a quantity in which two things must be specified:
 - Distance from the reference point
 - Direction from the reference point



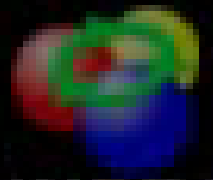
VECTOR!!!

- <https://www.youtube.com/watch?v=A05n32B10aY>



Position as a Vector





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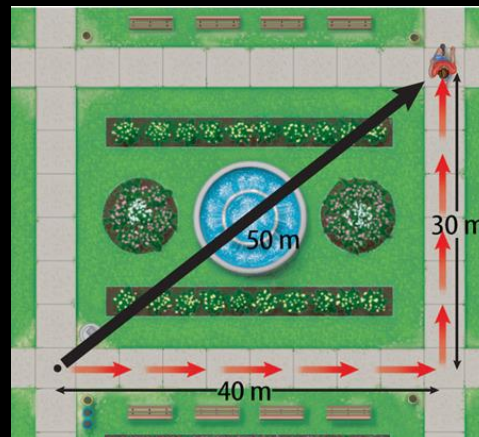
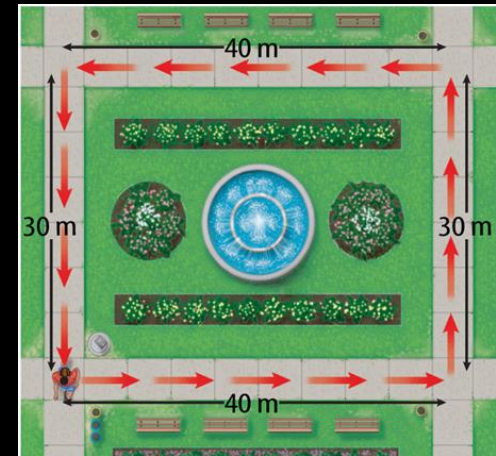
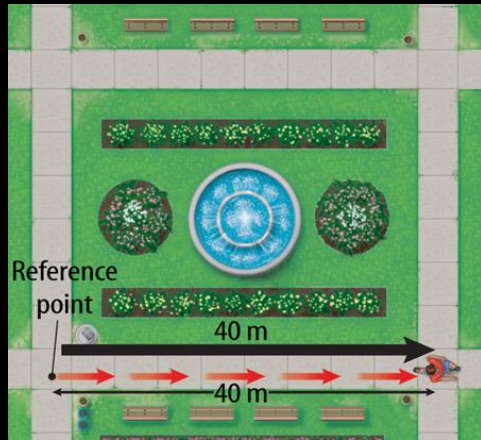
Changing Position

- The change in an object's position is called its **displacement**.
 - The difference between a starting point and a finishing point.
 - Includes a size and a direction.
 - Is a vector.

Displacement

- Direction of displacement is the direction from starting point to end point.
- Size of displacement is the distance from the starting point to the ending point.

Distance Vs Displacement

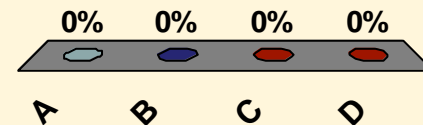


LESSON 1 Review



Displacement is a(n) _____ because it has both size and direction.

- A speed
- B velocity
- C** vector
- D acceleration



HOME

Resources

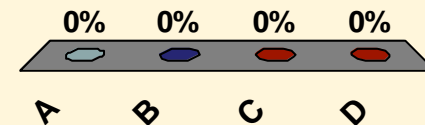


LESSON 1 Review



Position is defined relative to _____.

- A** a reference point and a vector
- B** displacement and reference directions
- C** a vector and reference directions
- D** a reference point and reference directions



LESSON 1 Review



Which of the following statements is true?

- A Displacement and distance traveled are always the same.
- B Displacement and distance traveled are never the same.
- C Distance traveled is the direction of the of the displacement vector.
- D** Displacement and distance traveled are the same if the direction does not change.

