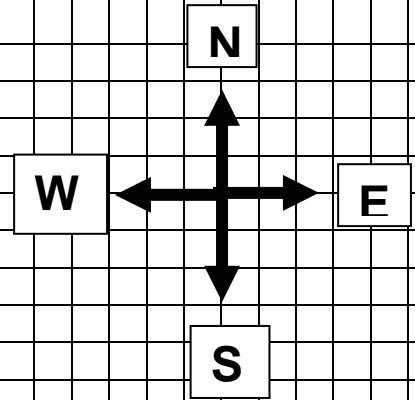


# Displacement vs. Distance Worksheet



●  
Home

**Scale:** Each unit equals 0.5 cm

| Leg | Distance | Total Distance | Displacement |
|-----|----------|----------------|--------------|
| 1   |          |                |              |
| 2   |          |                |              |
| 3   |          |                |              |
| 4   |          |                |              |

## Displacement vs. Distance Worksheet

The purpose of this Worksheet is to:

1. Demonstrate the difference between Displacement and Distance.
2. For the student to practice making measurements.
3. To use Trigonometry to calculate Displacement.

Each student will need a copy of the worksheet, a ruler and a protractor.

Provide the following Directions:

1. Measure a distance 10 cm straight East and mark it as Point A.
  - a. Write down the Distance for Leg 1.
  - b. Measure and write down the Displacement.
2. Measure a distance 10 cm straight North and mark it as Point B.
  - a. Write down the Distance for Leg 2.
  - b. Write down the Total Distance Traveled from Home.
  - c. Using the ruler and protractor measure and write down the Displacement.
  - d. Use Trigonometry to calculate the Displacement.
  - e. Compare Calculation to Measurement.
3. Measure a distance 10 cm straight East and mark it as Point C.
  - a. Write down the Distance for Leg 3.
  - b. Write down the Total Distance Traveled from Home.
  - c. Using the ruler and protractor measure and write down the Displacement.
  - d. Use Trigonometry to calculate the Displacement.
  - e. Compare Calculation to Measurement.
4. Measure a distance 10 cm straight South. Where are you?
  - a. Write down the Distance for Leg 4.
  - b. Write down the Total Distance Traveled from Home.
  - c. Measure and write down the Displacement.