

Scalars and Vectors

1) Identify each of the following quantities as either a scalar or a vector.

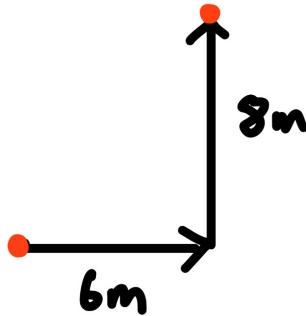
- a) The temperature of a classroom
- b) The velocity of a baseball thrown by a pitcher
- c) The length of a soccer field
- d) The perimeter of the track field
- e) The mass of a textbook

2) A person walks 1.0m East, 3.0m West then 12m East.

- a) What is the distance travelled?
- b) What is the displacement?

3) A hamster runs 6m East then 8m North.

What is the displacement (magnitude and direction)?



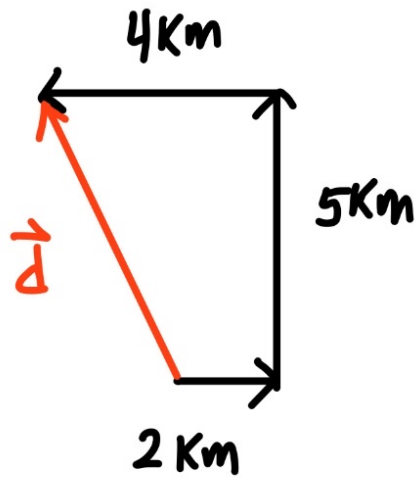
4) Jane drives 100km West, 50km South and 100km North.

- a) Draw out her path.
- b) How much distance does she travel?
- c) What is her displacement?

5. Daniel runs around a 400m circular track field three times.

- a) What is the distance travelled?
- b) What is his displacement?

6. A bird flies 2km East, 5km North and 4km West as shown below. What is the bird's displacement?



7. A hamster walks 100m 30° N of E and then walks 200m 60° N of W.

- a) What is the distance travelled?
- b) What is the displacement?