

Displacement vs Distance

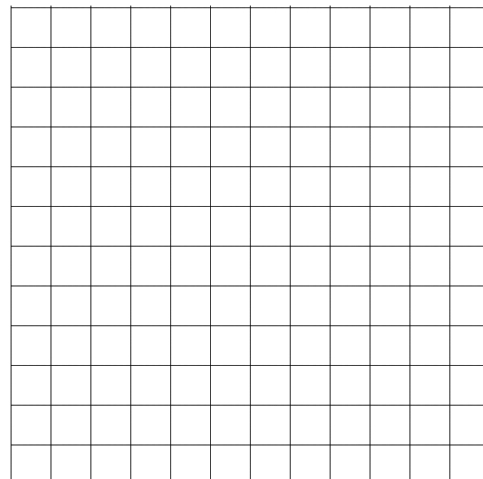
Example #1:

A person rides their bike 6.0 km east [E] and then 8.0 km north [N].

Draw their path on the grid to the right.

What is the total distance covered?

What is the displacement?



What is the average speed if it took 2.0 hours to complete the journey?

What is the average velocity (assuming it took 2.0 hours to complete the journey).

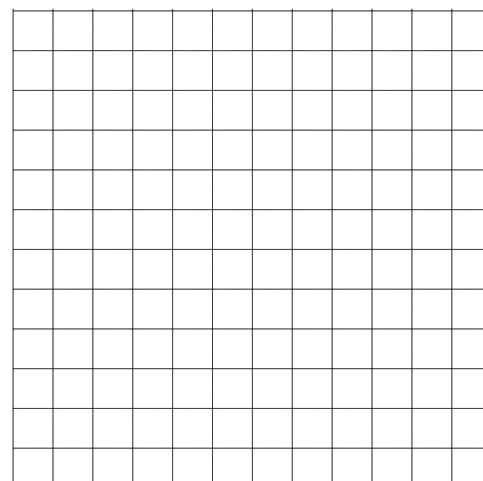
Example #2:

A person walks 14.14m northeast [NE] and then 5.00m east [E].

Draw their path on the grid to the right.

What is the total distance covered?

What is the displacement?



What is the average speed if it took 12.5s to complete the journey?

What is the average velocity (assuming it took 12.5s to complete the journey).