## Distance and Displacement Worksheet

Please write all answers on Graph Paper!
For each question plot the path on the grid paper.
You can make each square on graph paper $=$ to 1 km
Use Up for North, Down for South, Left for West, and Right for East.

1. Joe drives his car 7 kilometres north. He stops for lunch and then drives 5 kilometres south. What distance did he cover? What was his displacement?
2. Jeremy walks to the pizza place for lunch. He walk 1 km east, then 1 km south and then 1 km west. What distance did he cover? What was his displacement?
3. On his fishing trip Devin takes the boat 12 km south. The fish aren't biting so he goes 4 km back north. He follows a school of fish 1 km further north. What distance did he cover? What was his displacement?
4. Miranda goes on a camel safari in Africa. They she travels 5 km north, then 3 km south and then 1 km north again. What distance did he cover? What was her displacement?
5. Tong walks to his school which is 2 km east away from his house. He travels 1 km east before he realizes he forgot his backpack and then walks back home to get it. After picking up his bag he then heads back to school. What distance did he cover? What was his displacement?
6. We rent a private jet for the weekend. We fly 400 km south to New York, then 1200 km south to Miami. What distance did we cover? What was our displacement? (for this problem, make each square $=100 \mathrm{~km}$ )
7. Gracie buys a new Seadoo. She goes 12 km north from the beach. She jumps wakes for 6 km to the east. Then chases a boat 12 km south. She then turns and goes 3 km to the West. What distance did she cover? What was her displacement?
8. Sam goes cruising on his dirt bike. He rides 700 m north, 300 m east, 400 m north, 600 m west, 1200 m south 300 m east and finally 100 m north. What distance did he cover? What was his displacement? (use 1 square $=100 \mathrm{~m}$ )
9. Austin buys a new moped. He travels 3 km south and then 4 km east, and then 3 km north. How far does he need to go to get back to where he started?
