Distance and Displacement Practice

Calculate the *distance* and *displacement* in each of the following situations. Include a *direction* (example: north or northwest) with your answer.

1. David walks 3 km north, and then turns east and walks 4 km.
2. Amy runs 2 miles south, then turns around and runs 3 miles north.
3. Jermaine runs exactly 2 laps around a 400 meter track.
4. Derrick crawls 4 feet south, and then turns east and crawls 6 feet.
5. Ray runs 30 feet north, 30 feet west, and then 30 feet south.

Distance and Displacement Practice

*Find the distance (Dist) and displacement (Displ) each person moves in the following situations. Record your answers on your paper in the appropriate blank.*

1. Jamison spins around 5 times without moving any direction.
2. Cassidee walks 1 mile north then turns west and walks 2 miles. She then walks south 1 mile.
3. Taja walks two miles north from her door to the park, then returns home to her door.
4. Sandy ran 8 blocks north, and then 2 blocks south back toward her starting point.
5. Neva swam 3 complete laps in a 50 meter pool. (1 lap is one length of the pool)

*Draw your own diagram for the following situations. Then, find the distance (Dist) and displacement (Displ) each person moves. Record your answers on your paper the same as you did for 1-5.*

1. John flies directly east for 20 km, then turns to the north and flies for another 10 km before dodging a flock of geese.
2. Cameron flies directly west for 13 km, then turns to the south and flies for another 30 km. He then flies east for 13 km before landing at the airport.
3. Marissa runs north for 37 meters, then turns east and runs for another 10 meters, then stops.
4. Alex walks east for 3 km, stops for a break, and then runs the same direction for 4 km before he stops.
5. Taylor rides her bicycle 20 km north, turns around, and then rides the bicycle 15 km back toward her starting point.