Solve Problems by Drawing Diagrams

**Goal**
Use diagrams to solve problems.

Paulette’s team is playing in a soccer tournament near her home. Her home is also near this sign. Paulette and her mom must pick up some players in Madoc and Norwood to bring them to the tournament.

**How far will Paulette travel?**

**Paulette’s Solution**

**Understand**
My trip has 4 parts.
1. from home to Madoc
2. from Madoc to home
3. from home to Norwood
4. from Norwood to the tournament

**Make a Plan**
I will draw a diagram to show the parts of my trip. Then I will add the distances to get the total distance that I will travel.
**Carry Out the Plan**

18 km + 18 km + 27 km + 27 km = 90 km

I will travel 90 km altogether.

**Reflecting**

1. How did Paulette’s diagram help her to describe the problem?
2. Was drawing a diagram the only way to solve the problem? Explain your thinking.

**Checking**

3. Bobby sees this sign in a parking lot. How far will he have to hike to get drinking water, see the waterfall, and then return to the parking lot?

**Practising**

4. Maria lives 27 km east of Jeff. Zack lives 18 km east of Jeff. How far apart do Maria and Zack live?

5. Write a problem that can be solved using a diagram. Show your solution.