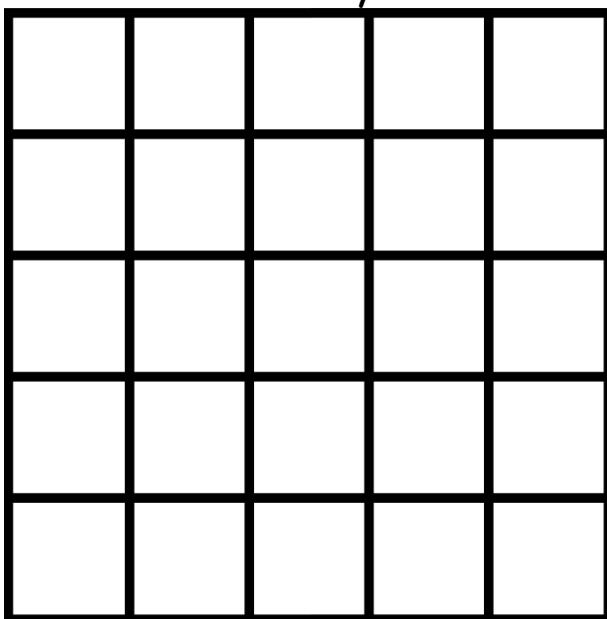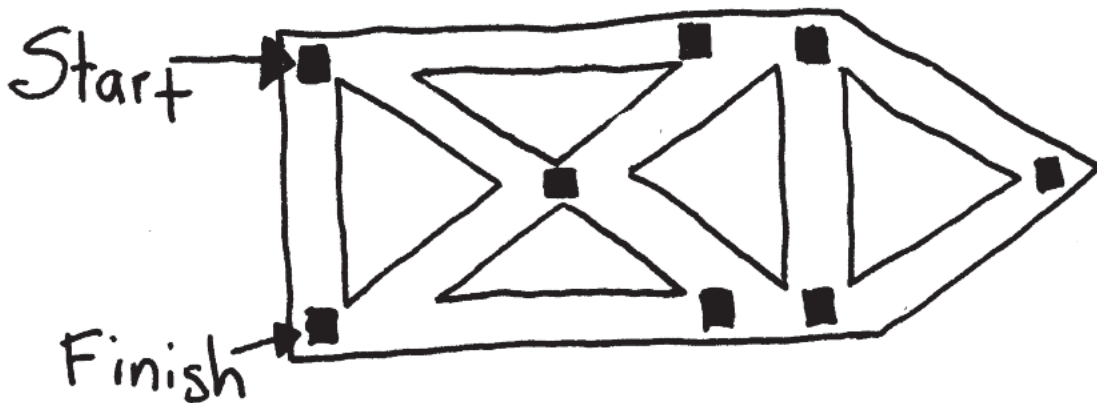# Grade Three Maths Problem Solvers Week Four

1. Five families are building houses in an isolated area. Roads will need to be built so that each house is connected to all of the other houses. How many roads will be built in total?

To solve this, draw 5 houses on paper spaced a fair way apart. Start by drawing lines from one house to the other houses and write down the number. Then, connect the second house to the other houses and so on. Remember, you only need to connect the houses to each other once.

2. Ten objects must be buried in the garden for a treasure hunt. To make this easier the garden has been divided into an imaginary grid, five squares across by five squares down. To make the treasure hard to find it is important to hide the objects in different areas. You must make sure that no more than two objects lie in a line in any direction.

3. For a school cross country, all of the local streets have been closed off. The runners must pass through each of the checkpoints. (Marked with squares). What is the shortest distance they can travel without going through any part of the course twice?

4. Queenie's garden is 10 metres long and 8 metres wide. Each day she walks around the very edge of the garden three times to water the plants. How far does she walk around the garden each day?

To solve this problem, draw a rectangle with the long sides 10cm and the short sides 8cm. This is your map of the garden with each centimetre on the map equal to one metre in the garden.

5. A gardener is asked to plant ten trees in five rows, with each row containing four trees. How did he do this?

Hint- The clue is in the picture!