**Two-step word problems**

For each of these problems, show how to find the solution using well labeled bar diagrams. Add any written explanations you think would be needed to make your solution process clear. Write a concluding sentence that makes it clear what your answer is to the problem. Do not try to squeeze all of your work onto a single sheet of paper.

1. Ali collected 137 stamps.

He collected 27 fewer stamps than his sister.

How many stamps did they collect altogether?

2. 4100 children took part in an art competition.

2680 of them were boys.

How many more boys than girls were there?

3. Emily bought 4 boxes of pencils.

There were 5 blue pencils and 3 red pencils in each box.

(a) How many pencils were there in each box?

(b) How many pencils did Emily buy?

4. Melissa has 6 postcards.

Sally has 3 times as many postcards as Melissa.

How many more postcards does Sally have than Melissa?

5. Ryan bought 18 pencils.

He bought twice as many pencils as pens.

How much did he pay for the pens if each pen cost $3?

6. Miss Meyer bought 15 kg of rice.

She bought 3 times as much rice as sugar.

If she already had 2kg of sugar before she went shopping, how much sugar does she have now?

7. Mary had 68 picture cards.

She kept 20 cards for herself, and gave the rest to a group of children.

Each child received 8 cards. How many children were there in the group?

8. Mr Anderson poured 80 ounces of maple syrup equally into each of 4 round jars. He poured 48 ounces of maple syrup equally into each of 3 square jars. How much more maple syrup is in a round jar than is in a square jar?