

 Notes for parents. Activity next page.**The purpose of this task is to help your child to:**

- show different ways of solving a problem
- talk about **how** they solve a problem and **why** they did it that way
- enjoy working out maths problems

You may like to print the task sheets on the next two pages.

Notice that each problem is 'open'. There could be a number of answers. There is no single right answer to any of the problems.

- Ask your child to choose a problem, and to explain to you what it is asking them to do.
- Have them suggest how they might go about working it out.
- Notice that most of the problems are open-ended: that is there is no single right answer. Give your child the time and encouragement to solve each problem in as many ways as they can.
- Listen carefully as your child explains their solution/s and tell them what you like about what they have done.
- Suggest that they try another problem when they're ready.
- The problems can be completed over time. You can come back to them. The idea is to explore thoroughly the possibilities of each problem one at a time, rather than hurrying on to the next one.



Activity | Problems to solve

Y4

You've been collecting cards and you have some spares. You've given some away to your friends. You have 34 left.

How many might you have started with and how many might you have given away?

You want to use the calculator to check your answer to $164 - 45$. Unfortunately the 4 and 6 buttons aren't working.

Suggest several ways you could still use the calculator.



$$1/5 + 3/5 = \square$$

Using pictures, words and numbers, how many different ways can you show this fraction?

Each week Rangī earns \$18. At the end of 5 weeks how much has Rangī earned?



Lucy, Aroha, Sefton and Marcus all solve this problem in a different way. Show how each person might work it out.

Two numbers multiply to make 160. One number has a zero on the end. What might the two numbers be?

Is there more than one answer? $\square \times \square = 160$

Jen and Max each have part of a whole apple. They are not necessarily fair shares.

What fraction might Jen and Max have?

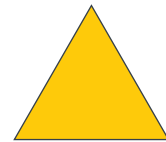


The garden plot is a rectangular shape. The measurement around the perimeter (the outside edge) is 36 metres

Draw what the garden plot might look like and write the measurements on each side.

Fold a piece of A4 paper 3 times. Draw a triangle that measures 4cm on each of the three sides. Cut out this triangle and another 7 at the same time as you cut through the layers.

Using at least 6 of the triangles, place them in different ways so that at least one edge of any triangle is against the edge of another. Draw around the shapes that you make.



Roll two dice twenty times. Each time, add the two numbers and write down their sum.



Look at the twenty sums and draw a circle around the number that appears most often. Can you explain this?

Roll, add and record another twenty times. Does the same number appear most often? Can you explain this?

What combinations of these groceries could you put in your bag if you can only carry 3 kilograms?

500g butter, 420g baked beans, 700g bread, 95g tuna, 1200g bananas, 1kg cheese, 225g biscuits, 300g pasta, 175g ham, 180g yoghurt, 400g muesli bars, 200g teabags, 100g soup mix.

