

Y4 Learning at home activity sheet #2

Problem 1:

I'm thinking of a 3-digit number. If I add its three digits together I get 26. What numbers could I be thinking of?



Problem 2:

What is the largest amount of money you can have in New Zealand coins without being able to make exactly \$1?



Problem 3:

Mum has a new kitchen. There is a drawer for cutlery which is 80 cm across and 40 cm deep. She has four rectangular trays that are each 20 cm by 40 cm that she can put into the drawer. The four trays are for knives, forks, spoons, and big utensils.

In how many different ways can Mum put the four rectangular trays into the drawer?



Number facts:

Have a family member test you on the number facts from the attached sheet. They can ask you any of the sums on each card. Choose two or three that you found more difficult and practice them a few times every day, so that you can answer any of the questions quickly.

Quick questions:

1. What is half of 12?
2. What number is one more than 329?
3. $73 \times 10 = \underline{\quad}$?
4. Write the fraction for one third.
5. How many tens are there in 120?
6. How many \$2 coins does it take to make \$10?
7. Which of these measures weight: metres, litres, or kilograms?
8. What number is one less than 650?
9. What is the largest even number less than 20?
10. What is 11×6 ?

Number line challenge:

Draw a number line. Put these numbers on it. Think carefully about which numbers to put on first.

$0, \frac{1}{3}, 5, \frac{1}{2}, 2, 1\frac{1}{2}, \frac{3}{4}$

What other numbers can you add to the number line?



How many shoes?

How many shoes do you have?

How many shoes does each other member of your family have? Make a display to compare the number of shoes each person has.



Learning at home: Notes for whānau

When your child finishes each activity, ask them to add a mouth to the face to show how they felt about that activity.



Problem 1:

First we need to know what the three digits could be. If all of the digits were 9s then they would sum to give 27. That's not right, but it's close, we want them to sum to 26, so we need to take 1 off one of the digits. So I must have one 8 and two 9s.

What numbers can be made up with one 8 and two 9s? There are just three of them. They are 998, 989, and 899.

Problem 2:

The most you can have is \$1.30. Here is how we can work it out:

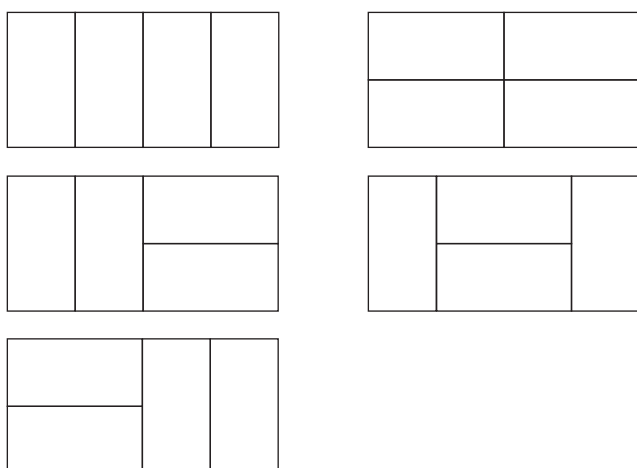
You can't have two 50c coins because they would make \$1. So you can only have one 50c coin. If you have five 20c pieces you could make a dollar, so you can only have four 20c pieces. That means that she can't have a 10c piece, because 50c plus 2x20c plus 10c would make \$1.

Problem 3:

One way to do this is to cut out four pieces of paper (say 2cm by 4cm) and place these on to a larger rectangle (4cm by 8cm).

The four trays will fit if they are all vertical (up and down), and they will fit if they are horizontal (left to right). By moving the trays we can also have two going each way. If you play around you will find that the two that are horizontal can go on the left, on the right or in the middle.

So Mum can have 5 different possible arrangements of trays:



Number-line challenge:

The first thing to do in creating this number line is to work out what numbers should go closest to each end. Here are the numbers to place on the line in order from smallest to largest.

$$0, \frac{1}{3}, \frac{1}{2}, \frac{3}{4}, 1\frac{1}{2}, 2, 5,$$

The smallest number is 0, and the largest number is 5, so put those in first.

Then work out about where each other number belongs

It is not important that numbers be placed accurately, but make sure they are in the right order and the spacing is reasonable. Here is a possible answer:



Challenge your child to add more fractions to the number line. Where does $\frac{2}{4}$ go? The same place as $\frac{1}{2}$.

How many shoes?

There are many ways your child might approach this task. Will they count individual shoes, or pairs of shoes? Do slippers or jandals count?

When they make their display they may draw pictures of the shoes, or they may make a table. You may like to help them draw a simple pictogram or bar graph.

Quick questions:

1. 6
2. 330
3. 730
4. $\frac{1}{3}$
5. 12
6. 5
7. Kilograms
8. 649
9. 18
10. What is 11×6 ?

Number facts to check:

$2 + 9 = 11$ $9 + 2 = 11$ $11 - 9 = 2$ $11 - 2 = 9$	$3 + 8 = 11$ $8 + 3 = 11$ $11 - 8 = 3$ $11 - 3 = 8$
$3 + 9 = 12$ $9 + 3 = 12$ $12 - 9 = 3$ $12 - 3 = 9$	$4 + 7 = 11$ $7 + 4 = 11$ $11 - 7 = 4$ $11 - 4 = 7$
$4 + 8 = 12$ $8 + 4 = 12$ $12 - 8 = 4$ $12 - 4 = 8$	$4 + 9 = 13$ $9 + 4 = 13$ $13 - 9 = 4$ $13 - 4 = 9$
$5 + 6 = 11$ $6 + 5 = 11$ $11 - 6 = 5$ $11 - 5 = 6$	$5 + 7 = 12$ $7 + 5 = 12$ $12 - 7 = 5$ $12 - 5 = 7$
$5 + 8 = 13$ $8 + 5 = 13$ $13 - 8 = 5$ $13 - 5 = 8$	$5 + 9 = 14$ $9 + 5 = 14$ $14 - 9 = 5$ $14 - 5 = 9$

$$6 + 7 = 13$$

$$7 + 6 = 13$$

$$13 - 7 = 6$$

$$13 - 6 = 7$$

$$6 + 8 = 14$$

$$8 + 6 = 14$$

$$14 - 8 = 6$$

$$14 - 6 = 8$$

$$6 + 9 = 15$$

$$9 + 6 = 15$$

$$15 - 9 = 6$$

$$15 - 6 = 9$$

$$7 + 8 = 15$$

$$8 + 7 = 15$$

$$15 - 8 = 7$$

$$15 - 7 = 8$$

$$7 + 9 = 16$$

$$9 + 7 = 16$$

$$16 - 9 = 7$$

$$16 - 7 = 9$$

$$8 + 9 = 17$$

$$9 + 8 = 17$$

$$17 - 9 = 8$$

$$17 - 8 = 9$$