

At-Home Investigation

Sharing out money.

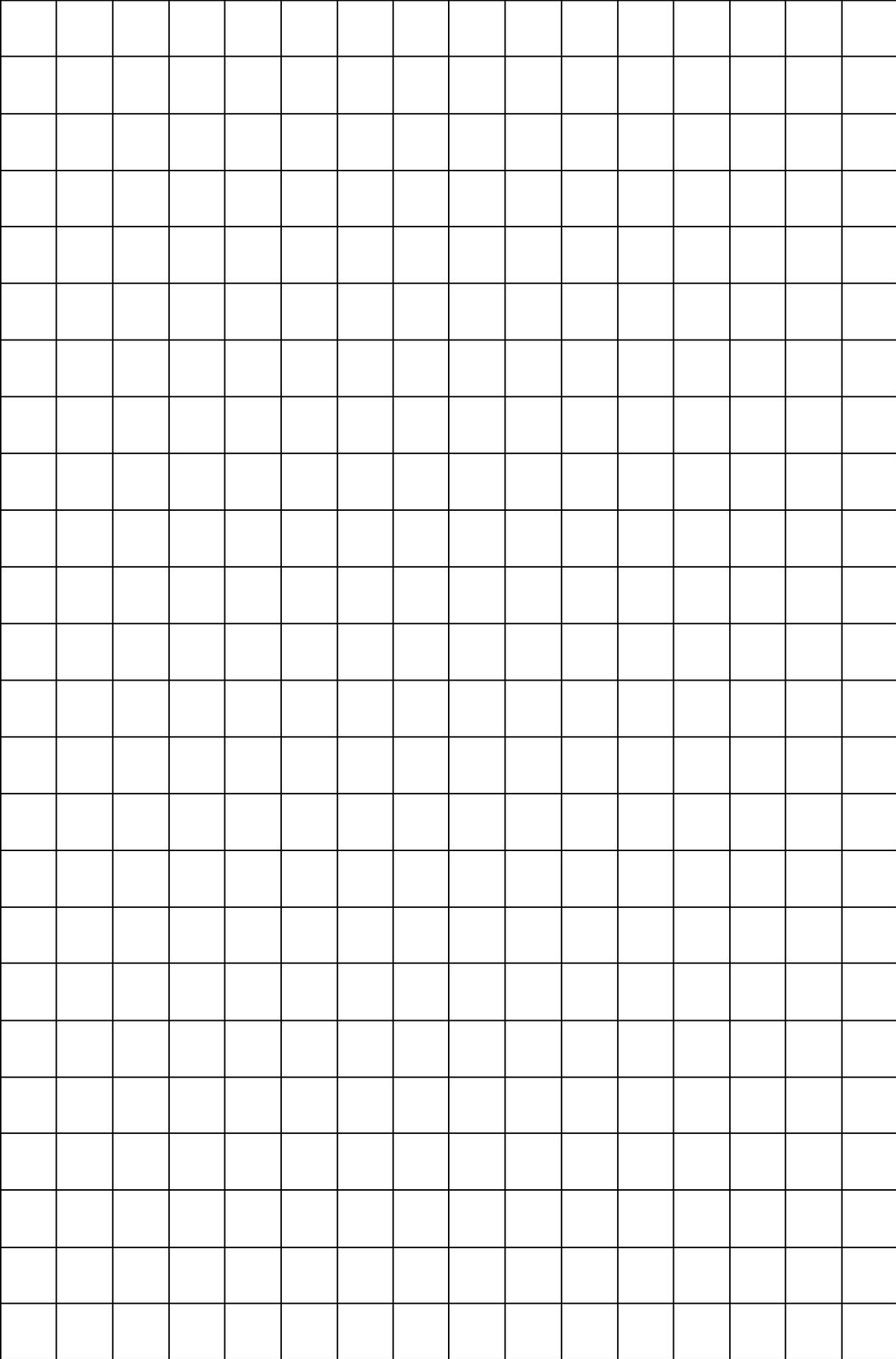
You have \$24 to share between people in as many ways as you can. How could it be done?

Make sure that you show how many people are sharing the money and how much each one would receive. Write a number sentence with multiplication for each one.

What would happen if you had an extra person to share the money with? How could you share \$24 fairly between 5 people?

Show how much money each person would receive and explain how you did it.



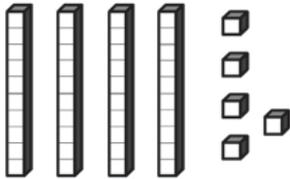


D11. Division with regrouping

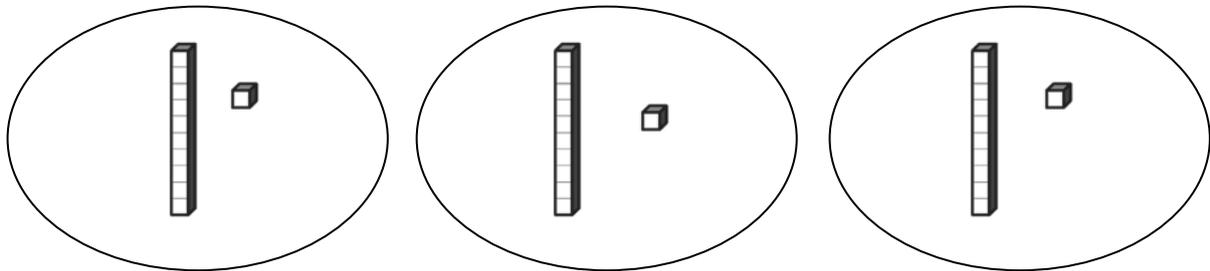
☐ Make the following number sentences using MAB. Try to share them equally. What will you do with the MAB that do not share equally?

Example:

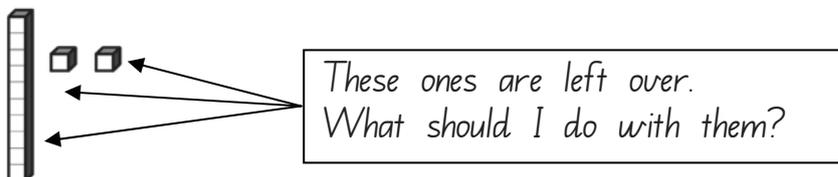
$$45 \div 3 =$$



Let's share them between three groups:



Uh oh, we have a problem:



What could you do with the left over MAB?

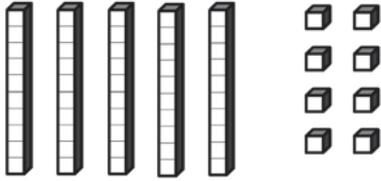
How could they be shared between the groups? Explain and draw a picture:

Did it work? Explain what you did and draw the blocks onto the pictures above:

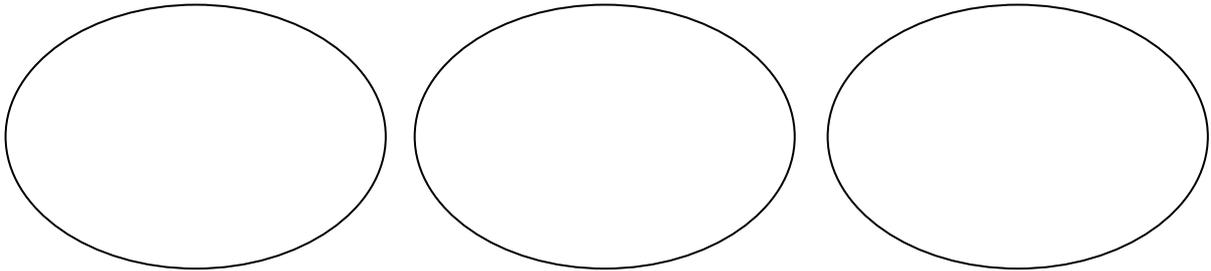
Try to use what you worked out to solve the questions below. Draw a picture to show the groups that you have made for each one.

Questions:

$$58 \div 3 =$$

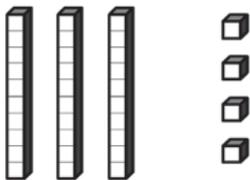


Let's share them:

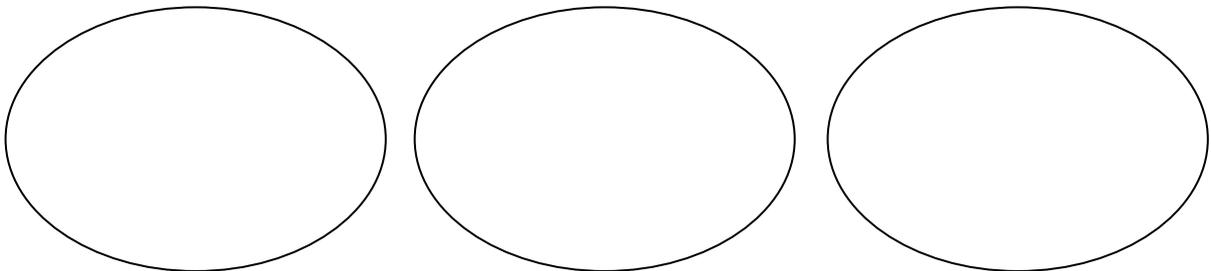


Explain how you did it:

$$34 \div 2 =$$



Let's share them:



Explain how you did it:

Multiplication practice grids:

| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|---|---|---|---|---|---|---|----|
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|---|---|---|---|---|---|---|----|
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|---|---|---|---|---|---|---|----|
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

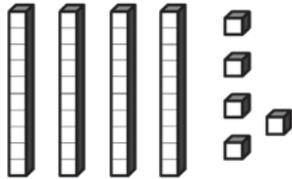
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|---|---|---|---|---|---|---|----|
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |

D12. Written methods for dividing

 The picture below shows what you learned in activity D7. In this task you will learn how to write this using a standard format

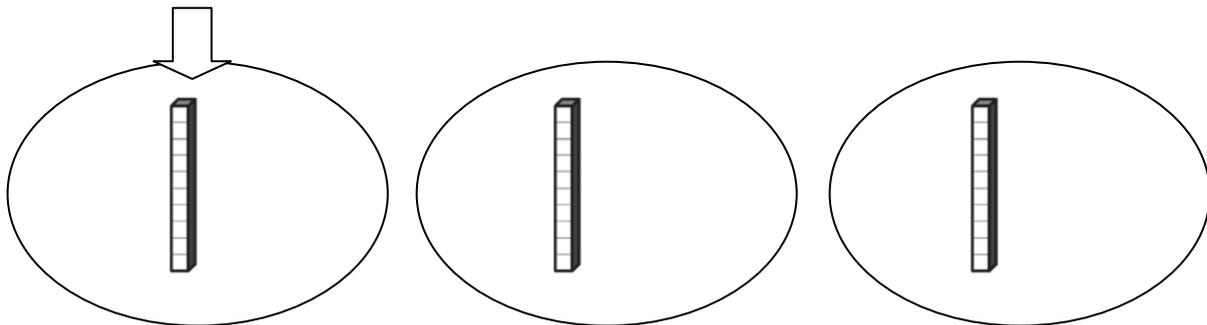
Example:

$$45 \div 3 =$$



Start like this:

$$3 \overline{)45}$$



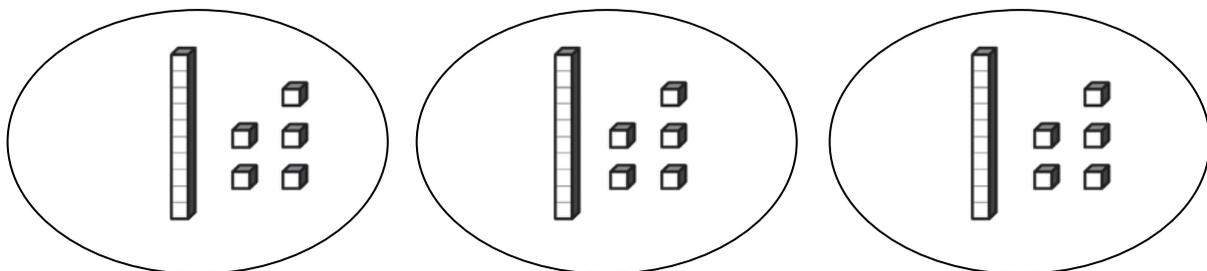
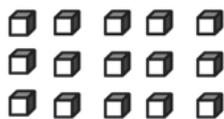
Write:

$$3 \overline{)4 \overset{1}{5}}$$

One ten fits in each group. I show this here.

 This ten is left over. I show it here

After I have regrouped my ten to make 10 ones, this is what I have to share:



Write:

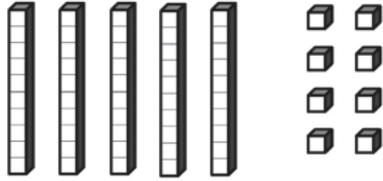
$$3 \overline{)4 \overset{1}{5}} 5$$

Fifteen ones divided into 3 groups gives 5 in each. I show this here.

Try to use what you worked out to solve the questions below. Draw a picture to show the groups that you have made for each one.

Questions:

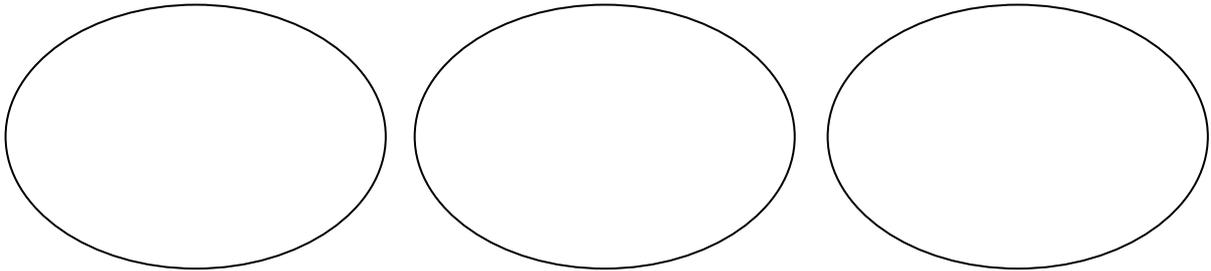
$58 \div 3 =$



Write it here:

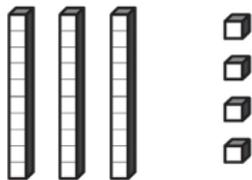
$$3 \overline{) 58}$$

Let's share them:



Explain how you did it:

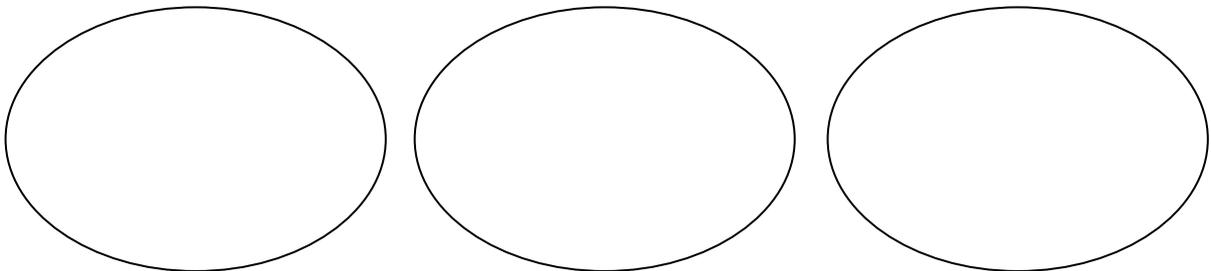
$34 \div 2 =$



Write it here:

$$2 \overline{) 34}$$

Let's share them:



Explain how you did it:

Interleaved practice

Number:

1. Complete the following number sequence and describe it:

____, 32, 36, _____, _____, 48, 52, _____, _____

2. Find the answer and show how you worked it out.

$$\boxed{} = 197 + 385$$

3. What number has 31 thousands, 2 hundreds, 16 ones and 4 tens?
4. Draw what 4×7 looks like and show how you would work out the answer.
5. How much change will you receive from \$2.50 if you buy 2 chocolates worth 95c each? Show how you worked it out.

Measurement/Geometry:

6. Find a rectangular prism (box, like for cereal) and a cylinder. How many faces or curved surfaces do they each have? What do you notice about the faces, edges and vertices (corners)? How are they the same? How are they different?
7. How many hours are there between 2:45pm and 5:15pm?
8. How many minutes are there in $3\frac{1}{4}$ hours?

Chance/Data:

9. Roll a dice 50 times and record how many times each number comes up. Use the table below to record your results.

| Number | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------|---|---|---|---|---|---|
| Number of times rolled | | | | | | |

D14. Identify situations requiring \times or \div

Often you need to decide what operation is needed in a situation and also decide whether an exact or approximate answer is required. The situations below are either multiplication or division. Decide on the operation needed and whether an exact or approximate answer is required. Give reasons for your answers.

Situations:

1. There are five people. Each person needs a certain number of drinks. How many drinks would be required?
2. There are around fifty people coming to the dinner party. Each person will eat around 5 or 6 canapés. How many should we order?
3. Our total bill at the café arrived. We were sharing it between 7 people. How much did each person have to pay?
4. Ice skating costs a certain amount every week. How much will it cost for a year?
5. A packet of lollies costs a certain amount. There are 10 lollies in the pack. How much is it per lolly?
6. Our class needed to be organised into 5 groups. How many students would be in each group?

What patterns have I found?