The 4 times-table

1 Complete the multiplication.

a)

$$8 \times 4 = 32$$

b)

$$4 \times 3 = 12$$

2 Complete the number sentences.

a) $6 \times 4 = 24$

b) $4 \times 3 = 12$

c) $28 = 7 \times 4$

d) $4 \times 12 = 48$

e) $0 \times 4 = 0$

f) $4 \times 9 = 36$

g) $24 \div 4 = 6$

h) $8 \div 4 = 2$

i) $0 \div 4 = 0$

j) $44 \div 11 = 4$

k) $20 \div 4 = 5$

l) $1 \times 4 = 4$

3 What multiplication and division statements does the array represent?

Complete the statements.
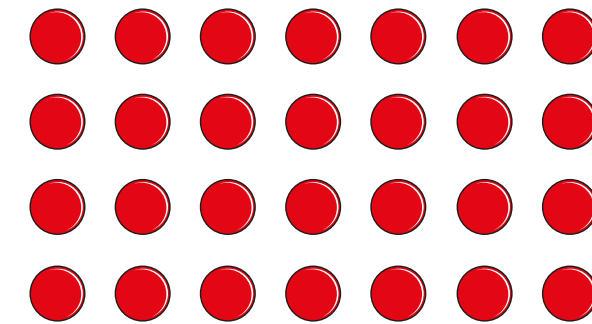
$$4 \times 7 = 28$$

$$7 \times 4 = 28$$

$$28 \div 7 = 4$$

$$28 \div 4 = 7$$

4 Complete the number sentences.

a) $2 \times 4 = 8$

$4 \times 4 = 16$

$8 \times 4 = 32$

b) $8 = 4 \times 2$

$16 = 4 \times 4$

$32 = 4 \times 8$

c) $3 \times 4 = 12$

$3 \times 8 = 24$

$3 \times 12 = 36$

What patterns do you notice?

5 Write <, > or = to compare the statements.

a) $48 \div 12$ $=$ 4

d) $4 \div 4$ $<$ 4×4

b) 36 $>$ $40 \div 4$

e) 1×4 $=$ 4×1

c) $16 \div 4$ $<$ 4×4

f) 4×2 $=$ $32 \div 4$

6 A paper clip is 4 cm long.

4 cm

How long are 6 of these paper clips?

24cm

7 Dexter buys 10 mugs and 4 key rings.
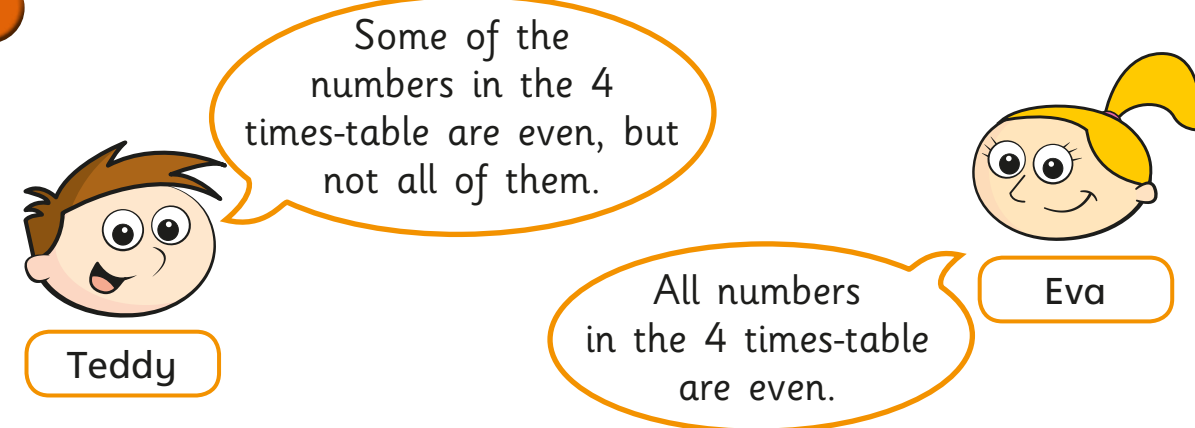
How much money does he spend in total?

£4

£3

£52

8 The pictogram shows the animals a group of children have as pets.

Complete the pictogram.

Animal	Pictogram	Number of animals
cat	●●●●	16
dog	○○○○○○○	28
bird	●●●●●	20
mouse	●	4

● = 4 animals

9

Some of the numbers in the 4 times-table are even, but not all of them.

Teddy

All numbers in the 4 times-table are even.

Eva
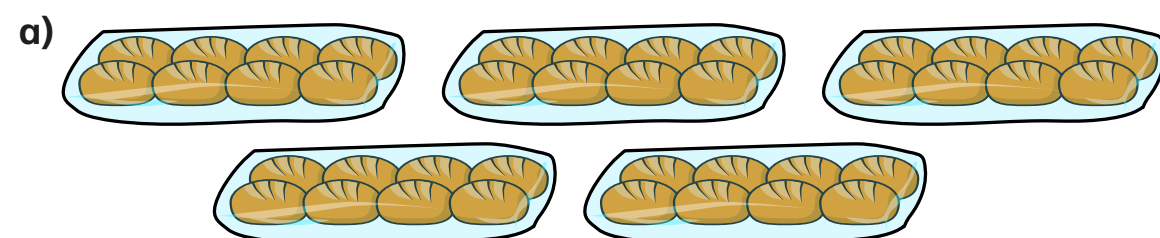
Who is correct? _Eva_
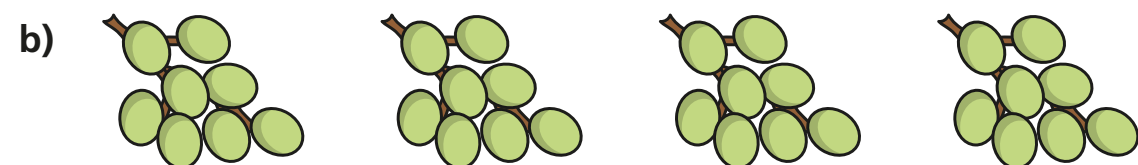
How do you know? Talk about it with a partner.

1 How many are there in total?

Complete the multiplications.

a)

$$\boxed{5} \times \boxed{8} = \boxed{40}$$

b)

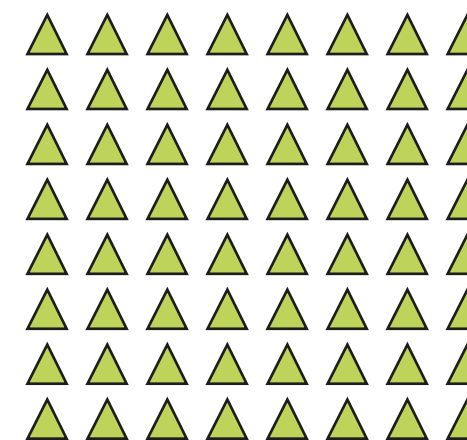$$\boxed{4} \times \boxed{8} = \boxed{32}$$

2 Complete the number tracks.

a)

0	8	16	24	32	40	48	56

b)

96	88	80	72	64	56	48	40

3 Here is an array made up of triangles.

a) What multiplication sentence can you see?

$$\boxed{8} \times \boxed{8} = \boxed{64}$$

b) What division sentence can you see?

$$\boxed{64} \div \boxed{8} = \boxed{8}$$

4 Complete the calculations.

Try to do the calculations in your head.

a) $6 \times 8 = \boxed{48}$ e) $72 \div 8 = \boxed{9}$

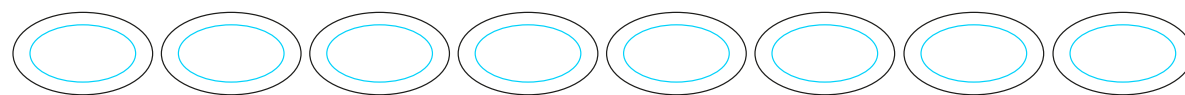b) $8 \times \boxed{7} = 56$ f) $\boxed{88} \div 11 = 8$

c) $10 \times 8 = \boxed{80}$ g) $\boxed{40} \div 8 = 5$

d) $\boxed{32} = 8 \times 4$ h) $8 \times 1 = \boxed{8}$

5 What multiplication can you see?

(8 oval shapes in a row)

6 Complete the multiplications.

a) $2 \times 8 =$ | 16
$4 \times 8 =$ | 32
$8 \times 8 =$ | 64

b) $8 = 8 \times$ | 1
$16 = 8 \times$ | 2
$32 = 8 \times$ | 4

What patterns do you notice?

7 **a)** Amir draws 7 jumps of 8 on a number line.

(number line with jumps: 0, 8, 16, 24, 32, 40, 48, 56)
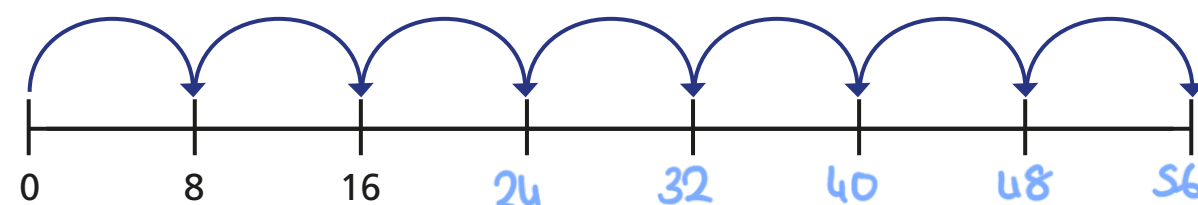
What number does Amir end on? | 56

Explain how you worked it out.

b) This time, Amir makes 7 jumps of 8, but starts from 1

(number line with jumps: 1, 9, 17, 25, 33, 41, 49, 57)
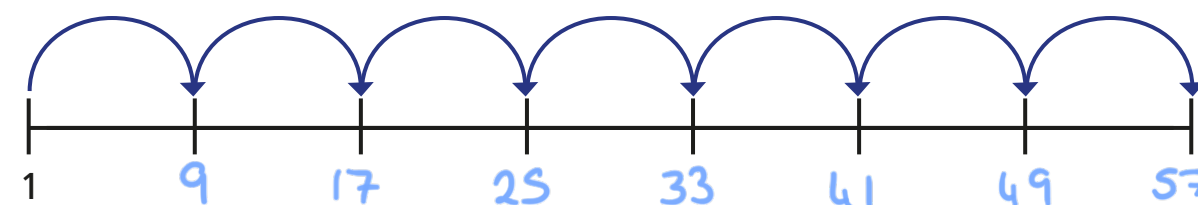
What number does Amir end on this time? | 57

Explain how you know.

8 Boats can be hired on a lake.

There are 5 large boats and 8 small boats on the lake.

Each boat is full.

How many people are on the lake?

| 72

Boats for Hire
Large boat: holds 8 people
Small boat: holds 4 people

8 Put the numbers into the sorting diagram.

2   4   16   32   48   36   12   6

In the 2 times-table   In the 4 times-table

(Venn diagram with three overlapping circles labelled "In the 2 times-table", "In the 4 times-table", "In the 8 times-table")

2
4
36 12
6
16
32
48

In the 8 times-table
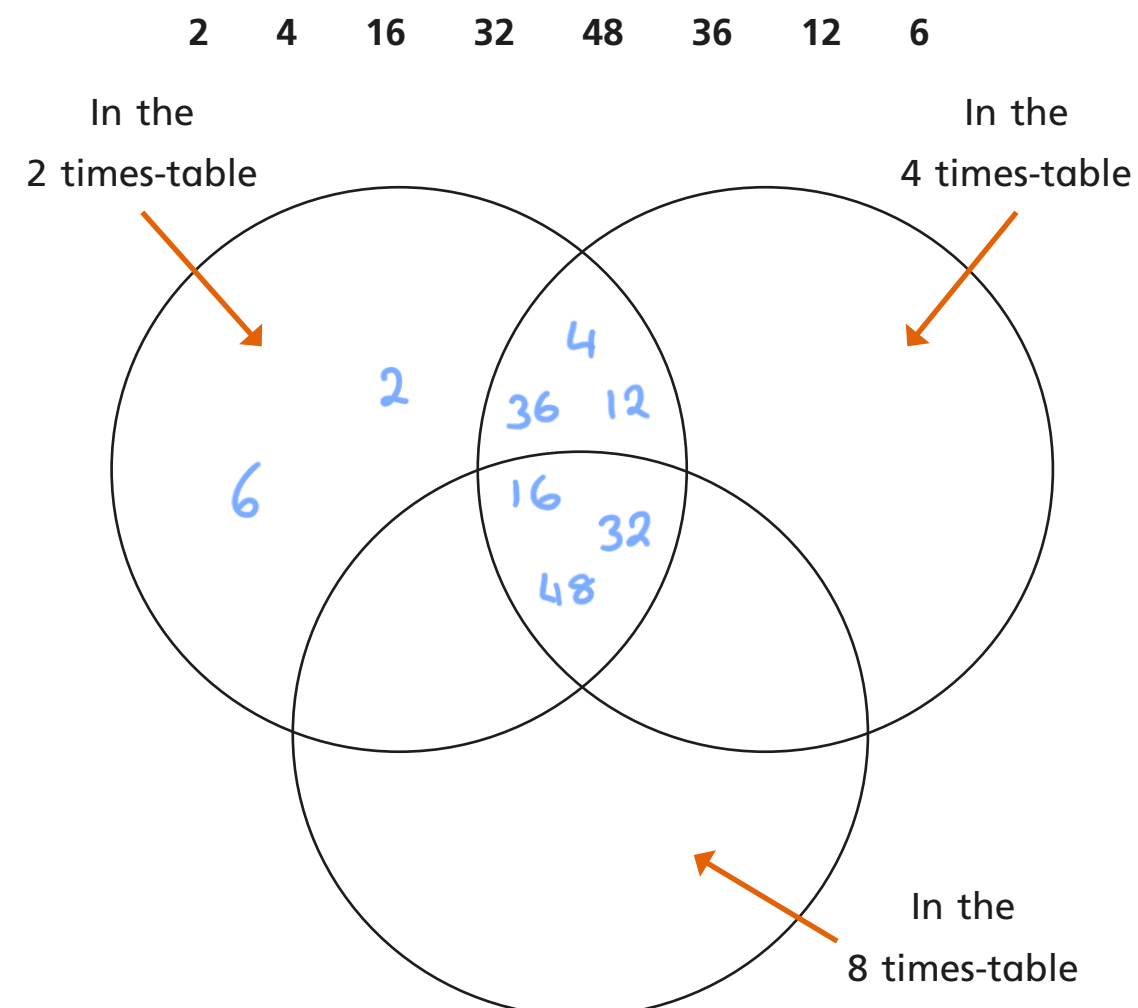
Are any of the parts empty? Why?

Talk about it with a partner.

Multiply 2-digits by 1-digit (2)

1 There are 23 marbles in a jar.

There are 5 jars.

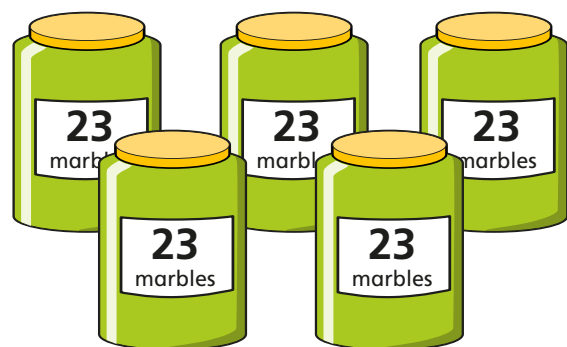| Tens	Ones
[tens blocks] [tens blocks]	▪ ▪ ▪
[tens blocks] [tens blocks]	▪ ▪ ▪
[tens blocks] [tens blocks]	▪ ▪ ▪
[tens blocks] [tens blocks]	▪ ▪ ▪
[tens blocks] [tens blocks]	▪ ▪ ▪

How many marbles are there in total?

5 × 3 ones = 15

5 × 2 tens = 100

15 + 100 = 115

5 × 23 = 115

There are 115 marbles in total.

2 Work out 4 × 15

Tens	Ones
10	1 1 1 1 1
10	1 1 1 1 1
10	1 1 1 1 1
10	1 1 1 1 1

4 × 5 = 20

4 × 10 = 40

4 × 15 = 60

3 Complete the multiplications.

a) 4 × 24 = 96

b) 3 × 17 = 51

c) 3 × 25 = 75

d) 34 × 4 = 136

4 Complete the column multiplications.

Tens	Ones
10 10	1 1 1 1
10 10	1 1 1 1
10 10	1 1 1 1

	T	O
	2	4
×		3
	7	2
	1	

Tens	Ones
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1
10 10 10	1 1 1 1 1

	T	O
	3	5
×		4
	1 4	0
	2	

5 Work out the multiplications.

a) 25 × 5

	T	O
	2	5
×		5
	1 2	5
	2	

b) 35 × 6

	T	O
	3	5
×		6
	2 1	0
	3	

c) 5 × 26

	T	O
	2	6
×		5
	1 3	0
	3	

d) 4 × 36

	T	O
	3	6
×		4
	1 4	4
	2	

6 Tommy works out 37 × 2

	T	O
	3	7
×		2
6	1	4

	T	O
	3	7
×		2
	7	4
	1	

What mistake has Tommy made? Work out the correct answer.

7 Find the missing numbers.

	2	2
×		4
	8	8

	3	1
×		4
1	2	4

8 Here are some digit cards. 1 2 3 4 5 8

a) Use the digit cards to create a multiplication and work out the answer.

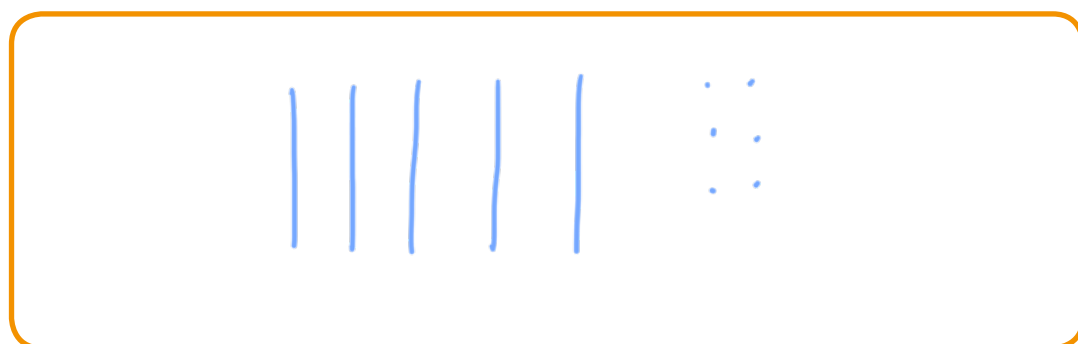E.g. [3][2] × [5] = [160]

b) Work with a partner to find calculations that have:

- an odd product
- an even product
- an exchange in the ones column
- an exchange in the ones and tens columns.

1 Rosie has 56 pencils.

a) Draw base 10 to represent the pencils.

b) Draw base 10 on the place value grid to share the pencils.

Tens	Ones

c) How many pencils are in each pot? 14

d) Did you have to make an exchange?

2 Eva has this money.

She wants to share the money equally between 3 people.

a) Use the place value chart to show how Eva can share the money.

Tens	Ones
£10	£1 £1 £1 £1
£10	£1 £1 £1 £1
£10	£1 £1 £1 £1

b) How much money does each person get? £14

3 Divide 72 by 3

Tens	Ones
10 10	1 1 1 1
10 10	1 1 1 1
10 10	1 1 1 1

Use the place value counters to help you.

72 ÷ 3 = 24

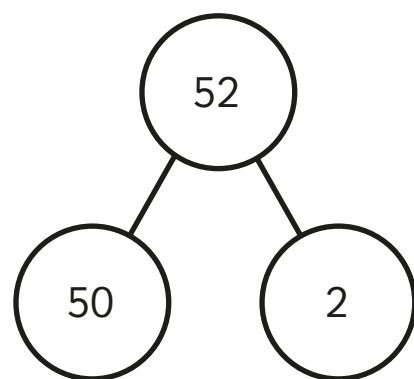**4** Use base 10 or counters to work out the divisions.

a) 45 ÷ 3 = $\boxed{15}$

b) 57 ÷ 3 = $\boxed{19}$

c) 92 ÷ 4 = $\boxed{23}$

5 Rosie and Tommy are working out 52 ÷ 4

They both use a part-whole model.

Rosie

52
50   2

Tommy

52
40   12
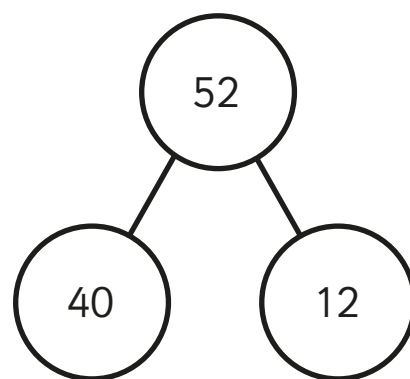
a) Whose part-whole model will help them with the division?
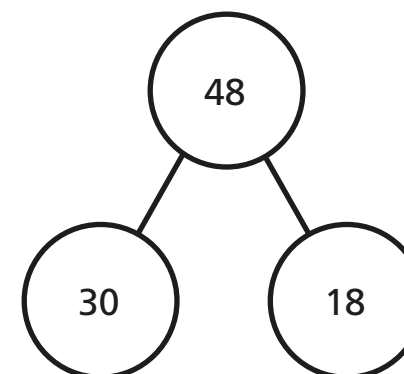
Tommy

How do you know?

40 and 12 are both divisible by 4

b) Use a part-whole model to work out 52 ÷ 4 $\boxed{13}$

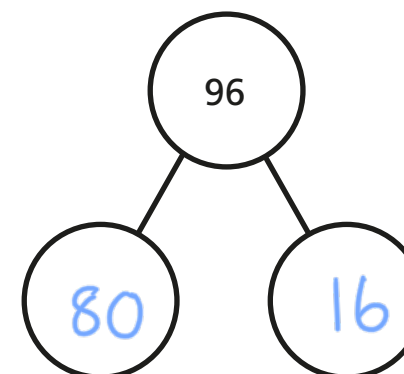**6** Use the part-whole models to complete the divisions.

a) 48 ÷ 3 = $\boxed{16}$

48
30   18

30 ÷ 3 = $\boxed{10}$

18 ÷ 3 = $\boxed{6}$

48 ÷ 3 = $\boxed{16}$

b) 96 ÷ 4 = $\boxed{24}$

96
80   16

c) 65 ÷ 5 = $\boxed{13}$

d) 75 ÷ 3 = $\boxed{25}$

7 Here are 3 divisions.

| 96 ÷ 8 | 96 ÷ 4 | 96 ÷ 2 |

a) What is the same about the questions? What is different?

b) Complete the divisions.

96 ÷ 8 = $\boxed{12}$ 96 ÷ 4 = $\boxed{24}$ 96 ÷ 2 = $\boxed{48}$

c) What do you notice? Talk about it with a partner.