Multiply 2-digits by 1-digit (1)

1 Ron, Eva and Mo each have 23 marbles.

Tens	Ones
10 10	
10 10	
10 10	

How many marbles are there in total?

3 × 3 ones = 9

3 × 2 tens = 60

9 + 60 = 69

3 × 23 = 69

There are 69 marbles in total.

2 Use the place value chart to work out 2 × 24

Complete the multiplication sentences.

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

2 × 4 = 8

2 × 20 = 40

2 × 24 = 48

3 Annie works out 43 × 2 = 86

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

	T	O
	4	3
×		2
	8	6

Talk about Annie's methods with a partner.

What is the same? What is different?

4 Complete the multiplications.

a)

	T	O
	2	4
×		2
	4	8

b)

	T	O
	4	4
×		2
	8	8

c) 31 × 3

		T	O	
		3	1	
	×		3	
		9	3	

d) 42 × 2

		T	O	
		4	2	
	×		2	
		8	4	

Compare answers with a partner.

5 Jack is trying to work out 34 × 2 using the column method.

I'm not sure what to do.

			2	
	×	3	4	

Show how Jack could improve his column method and work out the answer.

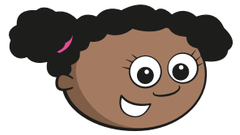
		3	4	
	×		2	
		6	8	

6 One toaster costs £32

How much do 3 toasters cost?

£96

7 Whitney has multiplied a 2-digit number by a 1-digit number.



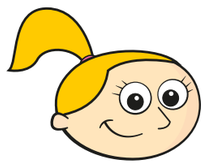
I had to do 30 + 9 = 39 to get my answer.

What numbers is Whitney multiplying?

Fill in the missing digits.

		1	3	
	×		3	
		3	9	

8 Filip used the column method to work out 41 × 2



I can work this multiplication out in my head.

		4	1	
	×		2	

a) How do you think Eva will work this out in her head?

b) Tick the multiplications that you can work out in your head. Various answers.

4 × 22	3 × 23	3 × 33
12 × 4	3 × 32	4 × 20

Multiply 2-digits by 1-digit

1 Brett uses a place value chart to work out 5 × 32

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

100 10

Talk about Brett's method with a partner.

Complete the multiplication.

5 × 32 = 160

Use Brett's method to work out 6 × 34

6 × 34 = 204

2 Rosie works out 4 × 37 using a written method.

		H	T	O						
			3	7						
	×			4						
			2	8			(7	x	4)	
		1	2	0		(3	0	x	4)	
		1	4	8						

Talk about Rosie's method with a partner.

Use Rosie's method to work out 6 × 28

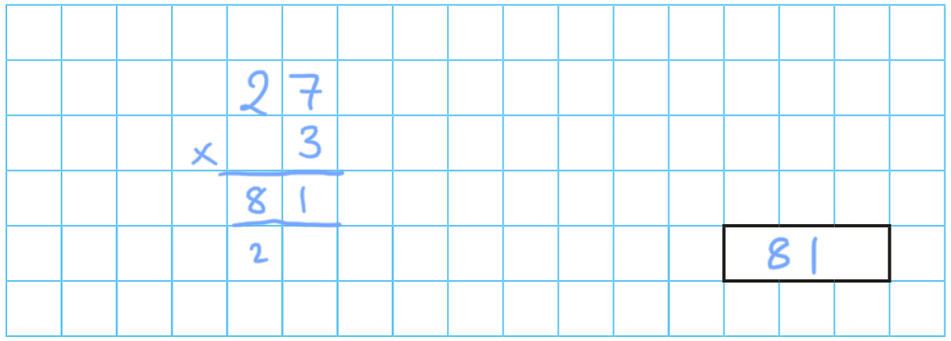
			2	8												
		×		6												
			4	8		(8 × 6)										
		1	2	0		(20 × 6)							1 6 8			
		1	6	8												

3 Dani uses a different written method to work out 8 × 42

		H	T	O	
			4	2	
	×			8	
		3	3	6	
			1		

Talk about Dani's method with a partner.

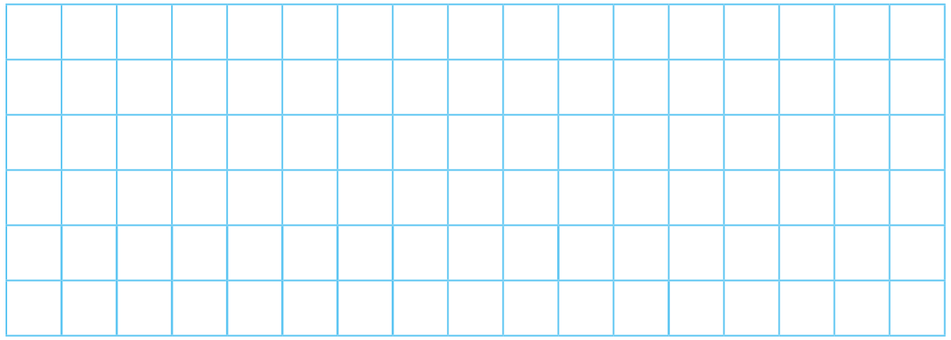
Use Dani's method to work out 3 × 27



4 Use a written method to complete the multiplications.

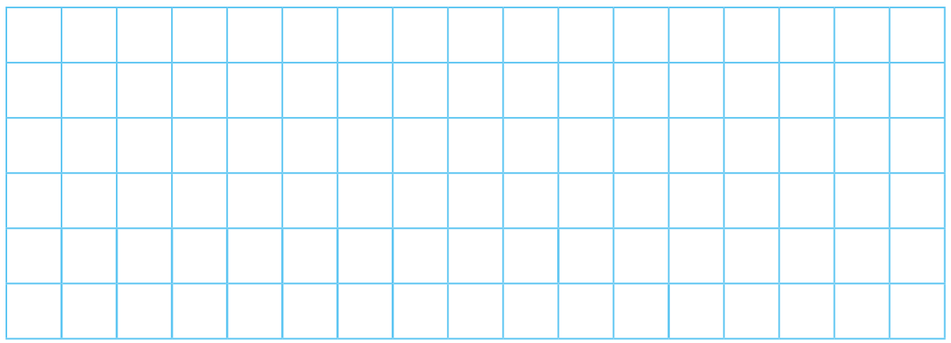
a) 38 × 6 = 228

c) 45 × 9 = 405



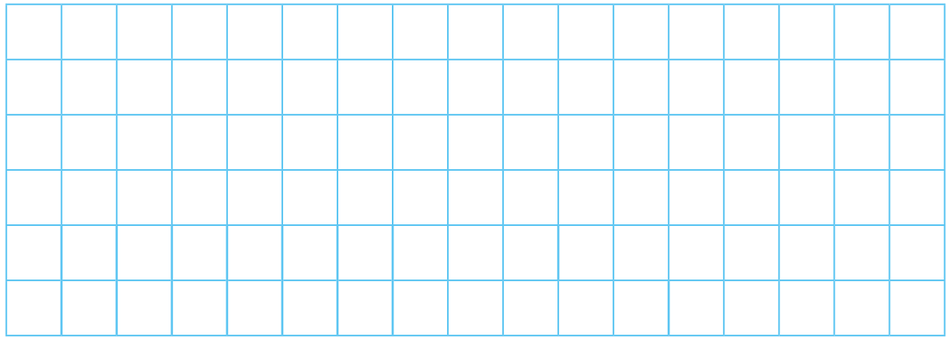
b) 71 × 3 = 213

d) 52 × 5 = 260



e) 29 × 8 = 232

f) 17 × 4 = 68



5 Class 4 is selling tickets for a play.

Tickets cost £5 per person.

56 tickets have been sold so far.

How much money has Class 4 collected?

£280

6 Rosie buys 8 bunches of flowers. Each bunch has 17 flowers.
How many flowers does she have altogether?

136

Multiply 3-digits by 1-digit

1 Filip uses a place value chart to help him multiply a 3-digit number by a 1-digit number.

Hundreds	Tens	Ones
100	10 10	1 1 1 1
100	10 10	1 1 1 1
100	10 10	1 1 1 1

a) What multiplication is Filip working out?

124 × 3

b) What is the answer to Filip's multiplication? 372

2 Use place value counters to complete the multiplications.

a) 3 × 213 = 639

b) 4 × 216 = 864

c) 5 × 106 = 530

d) 6 × 106 = 636

e) 4 × 209 = 836

f) 317 × 3 = 951

3 Complete the multiplication.

Use the place value chart to help you.

H	T	O
100 100	10	1 1 1 1 1
100 100	10	1 1 1 1 1
100 100	10	1 1 1 1 1

	H	T	O
	2	1	5
×			3
	6	4	5
		1	

4 Complete the multiplications.

a)

	H	T	O
	2	1	7
×			4
	8	6	8
		2	

b)

	H	T	O
	4	3	9
×			2
	8	7	8
		1	

c)

	H	T	O
	1	0	8
×			6
	6	4	8
		4	

d) 163 × 5

	H	T	O
	1	6	3
×			5
	8	1	5
	3	1	

e) 3 × 240

		H	T	O	
		2	4	0	
×				3	
		7	2	0	
		1			

f) 7 × 131

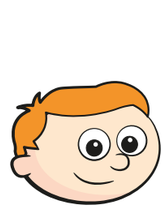
		H	T	O	
		1	3	1	
×				7	
		9	1	7	
		2			

5 A lorry driver travels 156 km per day.

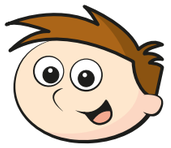
How many kilometres will the lorry driver have travelled after 3 days?

468km

6 Ron and Teddy are working out 5 × 245



Ron: I know the answer will be greater than 1,000 because I know 5 × 200 is 1,000



Teddy: I know the answer should end in 5 because I know 5 × 5 is 25

a) Who is correct? Circle your answer.

Ron **Teddy** **both** **neither**

b) Use a written method to work out 5 × 245

1,225

7 There are 7 year groups in a school.

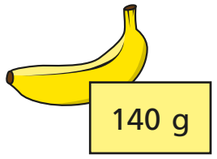
There are 112 children in each year group.

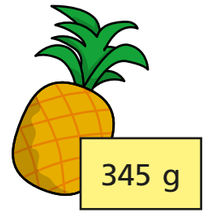
How many children are there in the whole school?

784

8 A banana weighs 140 g

A pineapple weighs 345 g





Bag **A** contains 8 bananas and bag **B** contains 3 pineapples.

Which bag weighs more and by how much?

Show your working.

Bag A weighs 85 g more than bag B.

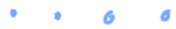
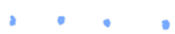
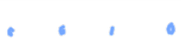
Divide 2-digits by 1-digit (2)

1 Rosie has 56 pencils.

a) Draw base 10 to represent the pencils.

Rosie shares the 56 pencils equally between 4 pots.

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 = 15

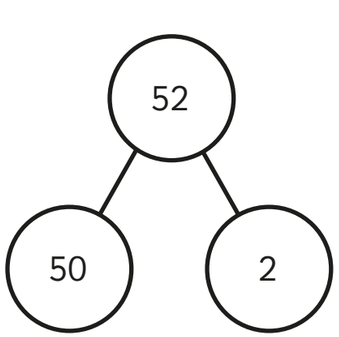
b) 57 ÷ 3 = 19

c) 92 ÷ 4 = 23

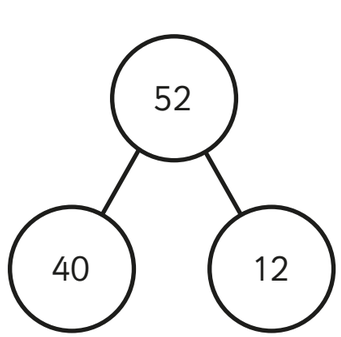
5 Rosie and Tommy are working out 52 ÷ 4

They both use a part-whole model.

Rosie



Tommy



a) Whose part-whole model will help them with the division?

Tommy

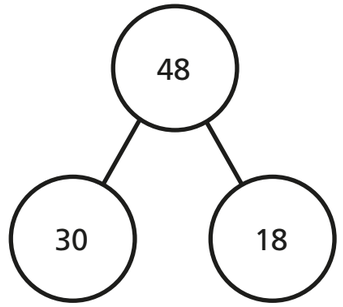
How do you know?

40 and 12 are both divisible by 4

b) Use a part-whole model to work out 52 ÷ 4 13

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

a) 48 ÷ 3 = 16

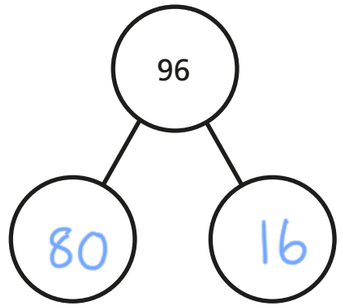


30 ÷ 3 = 10

18 ÷ 3 = 6

48 ÷ 3 = 16

b) 96 ÷ 4 = 24



c) 65 ÷ 5 = 13

d) 75 ÷ 3 = 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 = 12 96 ÷ 4 = 24 96 ÷ 2 = 48

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

Divide 2-digits by 1-digit (1)

1 Rosie is working out 93 ÷ 3 using a place value chart.

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

a) Talk about Rosie's method with a partner.

b) Complete the division.

93 ÷ 3 = 31

2 Use place value counters to complete the divisions.

a) 66 ÷ 3 = 22

b) 86 ÷ 2 = 43

c) 50 ÷ 5 = 10

d) 48 ÷ 4 = 12

e) 13 = 39 ÷ 3

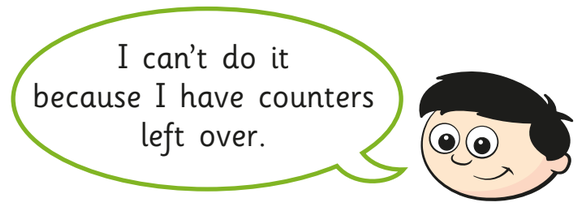
f) 84 ÷ 4 = 21

3 Dexter is working out 56 ÷ 4 using a place value chart.

T	O
10	1
10	1
10	1
10	1

10 1 1

a)



Do you agree with Dexter? No

Explain your answer.

He can exchange 1 ten for 10 ones.

b) Work out 56 ÷ 4 using place value counters.

56 ÷ 4 = 14

4 Use place value counters to complete the divisions.

a) 72 ÷ 3 = 24

b) 92 ÷ 4 = 23

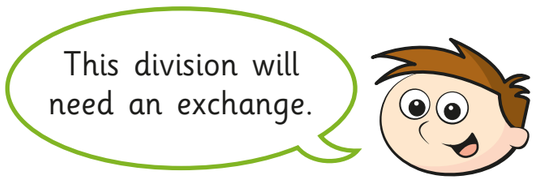
c) 65 ÷ 5 = 13

d) 48 ÷ 6 = 8

e) 15 = 45 ÷ 3

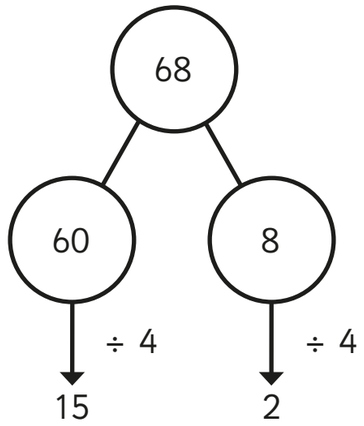
f) 64 ÷ 4 = 16

5 Teddy is working out 57 ÷ 3



How does Teddy know this? Talk about it with a partner.

6 Amir is working out 68 ÷ 4

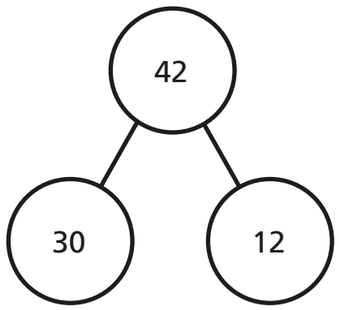


68 ÷ 4 = 17

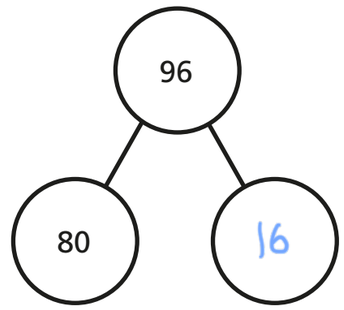
Talk about Amir's method with a partner.

7 Use Amir's method to complete these calculations.

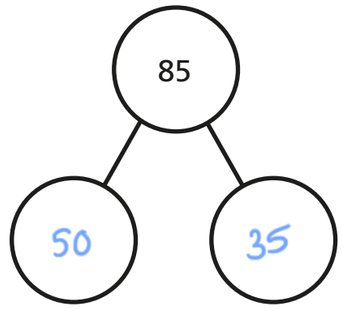
a) 42 ÷ 3 = 14



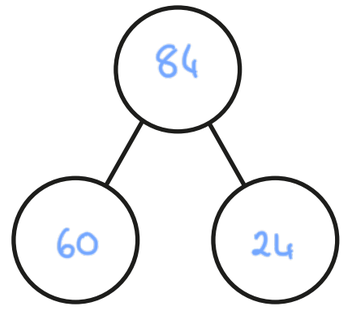
b) 96 ÷ 4 = 24



c) 85 ÷ 5 = 17



d) 84 ÷ 6 = 14



8 Kim has 92 beads.

She wants to share them equally between 4 friends.

How many beads will each friend get?

23

9 Write <, > or = to make the statements correct.

96 ÷ 8 = 72 ÷ 6

95 ÷ 5 < 63 ÷ 3

51 ÷ 3 > 64 ÷ 4

98 ÷ 7 < 95 ÷ 5