

Multiply 2-digit Numbers - Area Model (Monday)

Eva says,





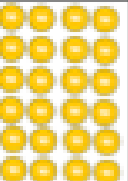

To multiply 23 by 57 I just need to calculate 20×50 and 3×7 and then add the totals.

What mistake has Eva made?

Explain your answer.

Amir hasn't finished his calculation.

Complete the missing information and record the calculation with an answer.

x	40	2
40		
6		

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Multiply 2-digit Numbers - Area Model ANSWERS (Monday)

Eva says,



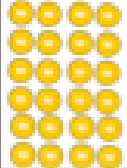



To multiply 23 by 57 I just need to calculate 20×50 and 3×7 and then add the totals.

What mistake has Eva made?
Explain your answer.

Eva's calculation does not include 20×7 and 50×3 . Children can show this with concrete or pictorial representations.

Amir hasn't finished his calculation. Complete the missing information and record the calculation with an answer.

\times	40	2
40		
6		

Amir needs 8 more hundreds, $40 \times 40 = 1,600$ and he only has 800

His calculation is $42 \times 46 = 1,932$

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Dora is wrong. Children may prove this with concrete or pictorial representations.

Multiply 4-digits by 2-digits (Tuesday)

Spot the Mistakes

Can you spot and correct the errors in the calculation?

		2	5	3	4
x				2	3
		₁ 7	5	₁ 9	2
		₁ 5	0	6	8
	1	2	₁ 6	₁ 6	0

Teddy has spilt some paint on his calculation.

		2	6	9	
x			2		
	2	₆ 2	₅ 9	₇ 5	2
	₁ 5	₁ 7	₁ 3		0
	₁	₁ 0	₁ 3	3	2

What are the missing digits?

What do you notice?

Multiply 4-digits by 2-digits ANSWERS (Tuesday)

Spot the Mistakes

Can you spot and correct the errors in the calculation?

		2	5	3	4
×				2	3
		₁ 7	5	₁ 9	2
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	1	2	₁ 6	₁ 6	0

There are 2 errors.
 In the first line of working, the exchanged ten has not been added.
 In the second line of working, the place holder is missing.
 The correct answer should be 58,282

Teddy has spilt some paint on his calculation.

		2		6	9
×				2	
		2	₆ 2	₅ 9	₇ 5
	₁ 5	₁ 7	₁ 3		0
	₁	0	₁ 3	₁ 3	2

The missing digits are all 8

What are the missing digits?

What do you notice?

Division with Remainders (Wednesday)

I am thinking of a 3-digit number.

When it is divided by 9, the remainder is 3

When it is divided by 2, the remainder is 1

When it is divided by 5, the remainder is 4

What is my number?

Always, Sometimes, Never?

A three-digit number made of consecutive descending digits divided by the next descending digit always has a remainder of 1

$$765 \div 4 = 191 \text{ remainder } 1$$

How many possible examples can you find?

Division with Remainders ANSWERS (Wednesday)

I am thinking of a 3-digit number.

When it is divided by 9, the remainder is 3

When it is divided by 2, the remainder is 1

When it is divided by 5, the remainder is 4

What is my number?

Possible answers:

129	219
309	399
489	579
669	759
849	939

Encourage children to think about the properties of numbers that work for each individual statement. This will help decide the best starting point.

Always, Sometimes, Never?

A three-digit number made of consecutive descending digits divided by the next descending digit always has a remainder of 1

$$765 \div 4 = 191 \text{ remainder } 1$$

How many possible examples can you find?

Sometimes

Possible answers:

$432 \div 1 = 432 \text{ r } 0$
$543 \div 2 = 271 \text{ r } 1$
$654 \div 3 = 218 \text{ r } 0$
$765 \div 4 = 191 \text{ r } 1$
$876 \div 5 = 175 \text{ r } 1$
$987 \div 6 = 164 \text{ r } 3$

Calculate with perimeter (Thursday)

Here is a square inside another square.



The perimeter of the inner square is 16 cm

The outer square's perimeter is four times the size of the inner square.

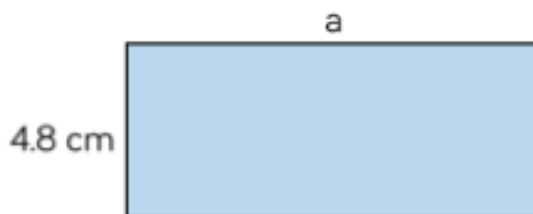
What is the length of one side of the outer square?

How do you know? What do you notice?



The value of c is 14 m.

What is the total perimeter of the shape?



The blue rectangle has a perimeter of 38 cm.

What is the value of a ?

Calculate with perimeter ANSWERS (Thursday)

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The perimeter of the inner square is 16 cm

The outer square's perimeter is four times the size of the inner square.

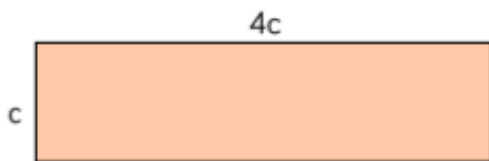
What is the length of one side of the outer square?

How do you know? What do you notice?

Small square =
16 cm

Large square =
64 cm

Length of one of
the outer sides is
8 cm, because 64
is a square
number.

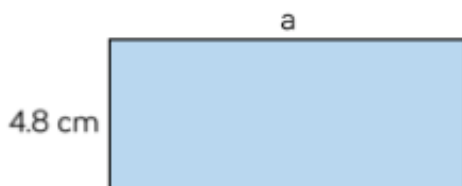


The value of c is 14 m.

What is the total perimeter of the shape?

$$4c + 4c + c + c = 10c$$

$$10 \times 14 = 140 \text{ m}$$



The blue rectangle has a perimeter of 38 cm.

What is the value of a ?

$$\text{Total perimeter} = 38 \text{ cm}$$

$$38 - (4.8 + 4.8) = 28.4$$

$$\text{So } 28.4 \text{ divided by } 2 = 14.2 \text{ cm}$$