

# Formal methods: divide integers

1 Here are some divisions.

6	1	4	2		

6	1	4	5		

6	1	4	3		

6	1	4	6		

6	1	4	4		

6	1	4	7		

What is the same and what is different about the calculations?

2 Mo is trying to work out  $248 \div 5$



I know the answer is not going to be a whole number.

a) How does Mo know the answer is not going to be a whole number?

b) Work out  $248 \div 5$

Write your answer in three different ways.

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3 Teddy has worked out  $176 \div 4$

		0	9	4
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4		1	37	16

a) What mistake has Teddy made?

b) What is the correct answer?

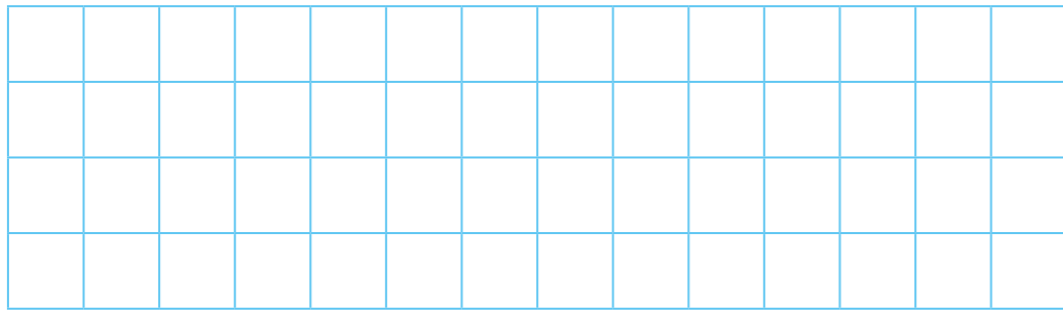
4 Work out the divisions. Give your answers as decimals.

a)  $534 \div 3 =$

b)  $426 \div 6 =$

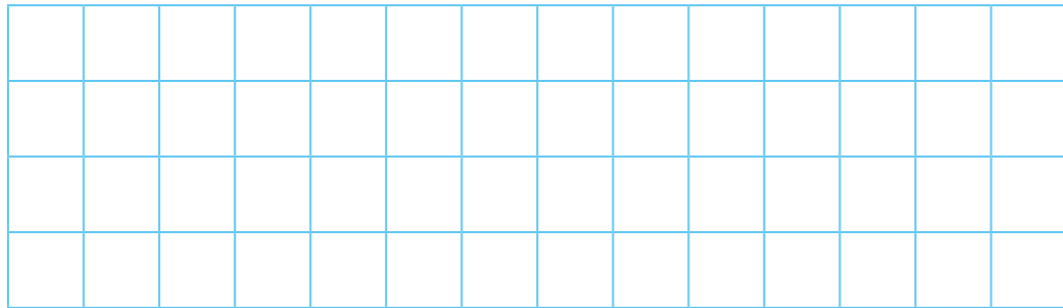

c)  $676 \div 5 =$

e)  $513 \div 4 =$



d)  $993 \div 6 =$

f)  $918 \div 8 =$



5 a) Work out  $85 \div 7$   
Give your answer to 3 decimal places.

b) Write  $\frac{85}{7}$  as a decimal to 3 decimal places.

6 To divide a number by 12 you can divide by 6 then divide by 2  
a) Use this method to work out  $345 \div 12$

b) What other pair of one-digit numbers could be used instead of 6 and 2?  
How do you know?

7 Work out these divisions. State which strategy you used.

a)  $812 \div 14 =$

b)  $315 \div 12 =$

8 Solve the equations.

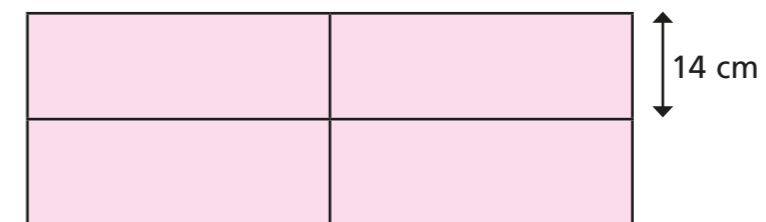
a)  $4g = 167$

b)  $32w = 1,960$

$g =$

$w =$

9 Four identical rectangles are connected to form a larger rectangle.  
The total area of the larger rectangle is  $924 \text{ cm}^2$



Find the perimeter of the larger rectangle.

cm

Discuss your strategy with a partner.

