

Lesson 1

L.O: I am learning to answer SATs questions involving the four operations.

Four Operations: Reasoning and Problem Solving

This week we will be using our knowledge on addition, subtraction, multiplication and division.

**The videos have been added as extra support.
You only have to watch them if you **NEED** to.**

Starter



The mass of a 10p coin is 6.5g.

The mass of a 5p coin is half the mass of a 10p coin.

What is the mass of these six coins **altogether**?

What is the question asking us to find?

What is the first thing we must do/find?

What do we already know?



Starter Answers

The mass of a 10p coin is 6.5g.

The mass of a 5p coin is half the mass of a 10p coin.

What is the mass of these six coins **altogether**?



The first thing we must do is find the mass of a 5p coin.

10p coin = 6.5g

A 5p coin is half the mass of 10p coin.

Half of 6 is 3, half of 0.5 is 0.25 so 5p coin = 3.25g

The picture shows 3 x 10p coins and 3 x 5p coins.

Ask the class to think of different methods to find the total mass of the coins, e.g.

$$(3 \times 6.5) + (3 \times 3.25)$$

OR

$(4 \times 6.5) + (1 \times 3.25)$ because 2 x 5p is the same as 1 x 10p

OR

$(6.5 + 3.25) \times 3$ i.e. add the mass of a 5p to a 10p, then multiply by 3

Addition Video

addition-primary-mov [↗](#) SHARE

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$493 + 294 + 61$

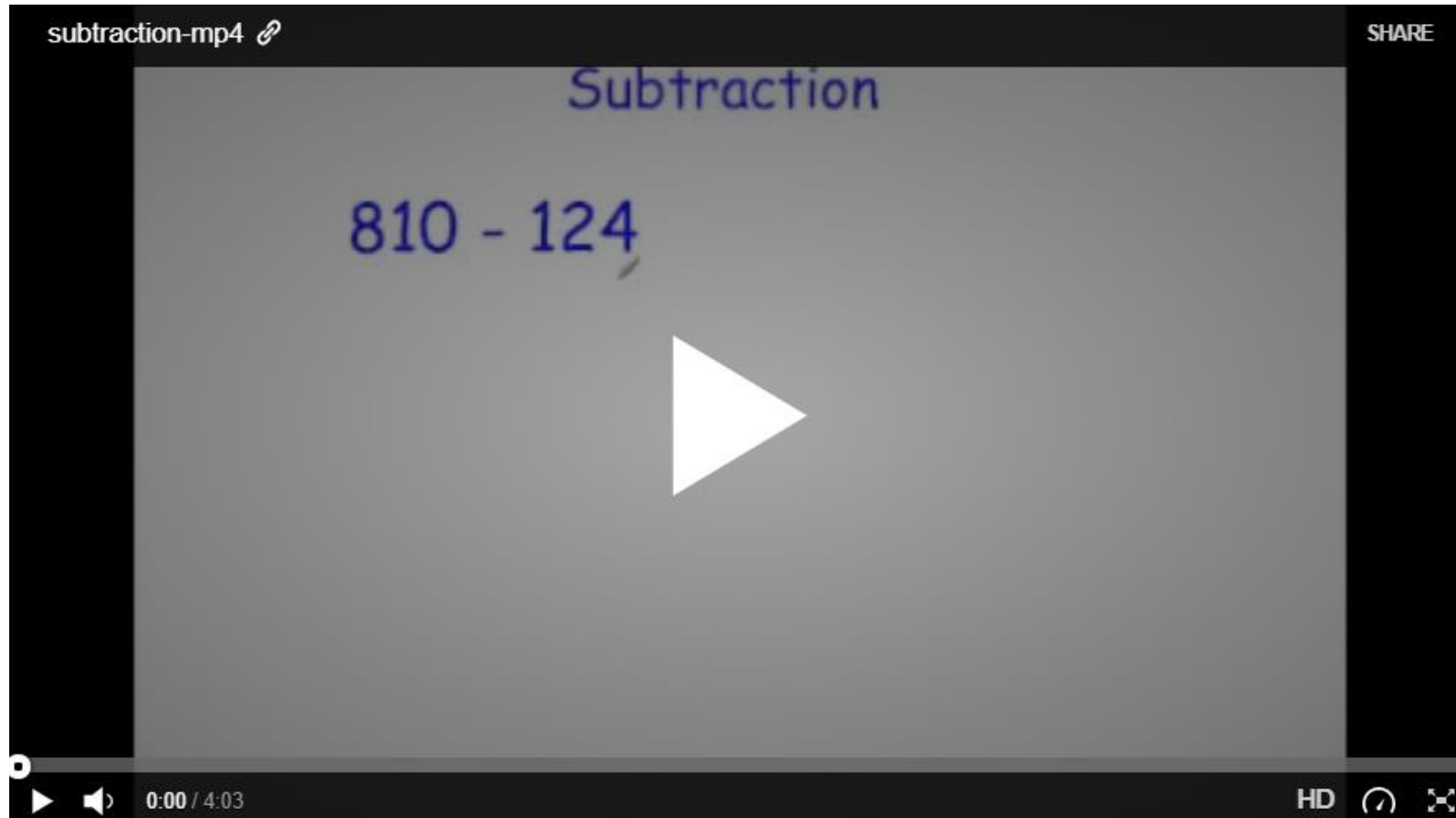
Addition

		4	9	3			
		2	9	4			
			6	1			

0:00 / 5:49 HD ↺ ⌂

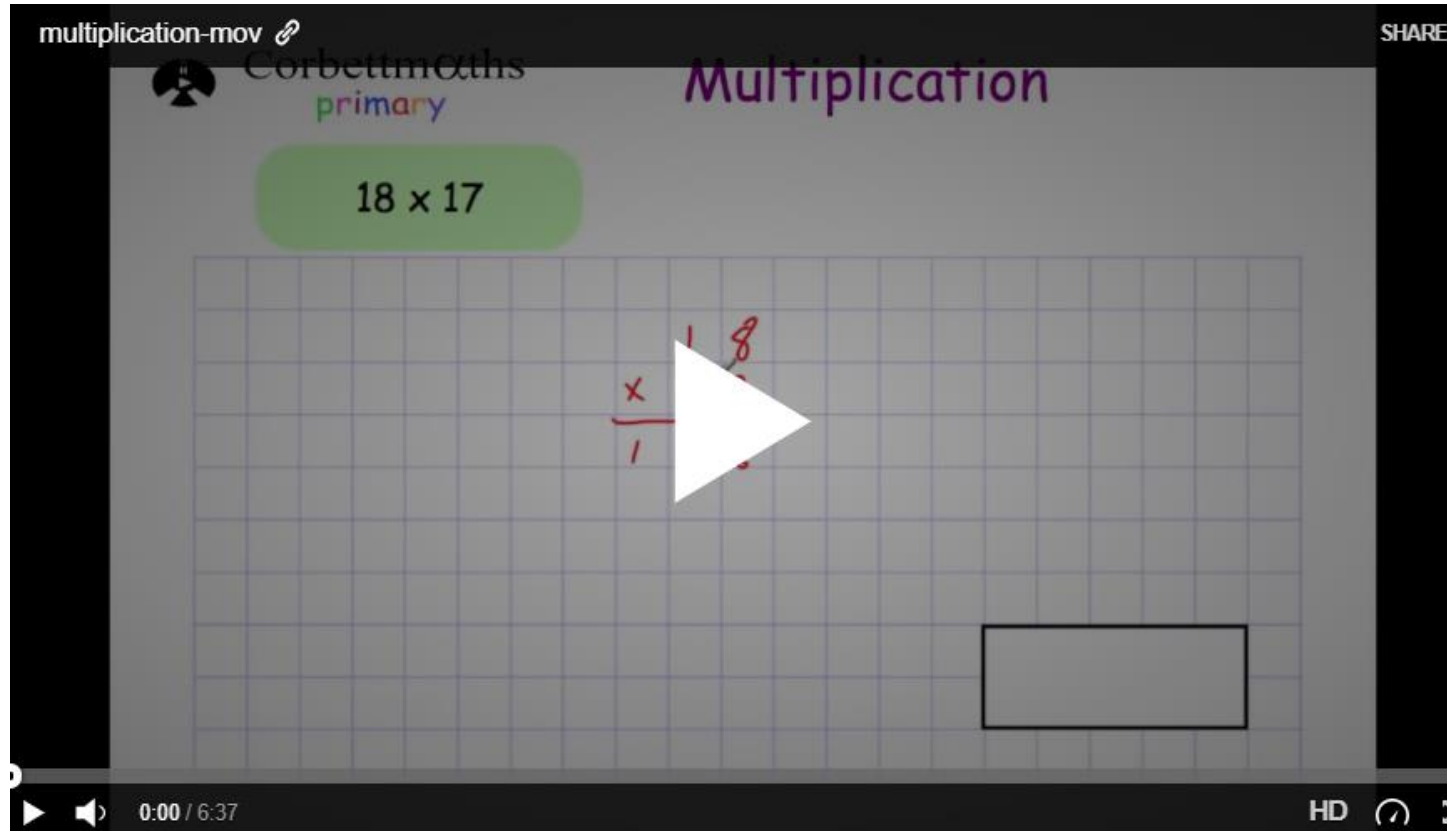
<https://corbettmathsprimary.com/2018/05/30/addition-video/>

Subtraction Video



<https://corbettmathsprimary.com/2018/05/30/subtraction-video/>

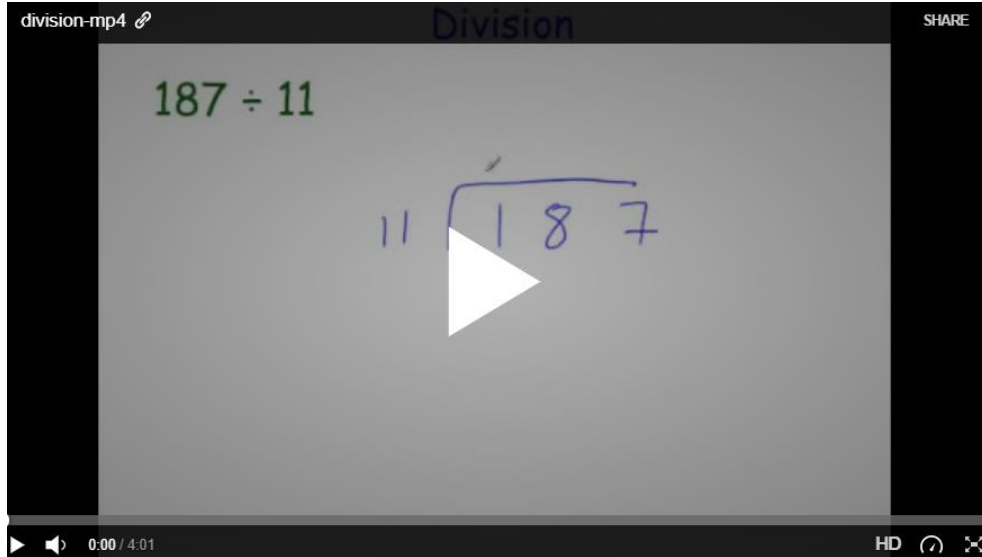
Multiplication Video



<https://corbettmathsprimary.com/2018/07/21/multiplication-video/>

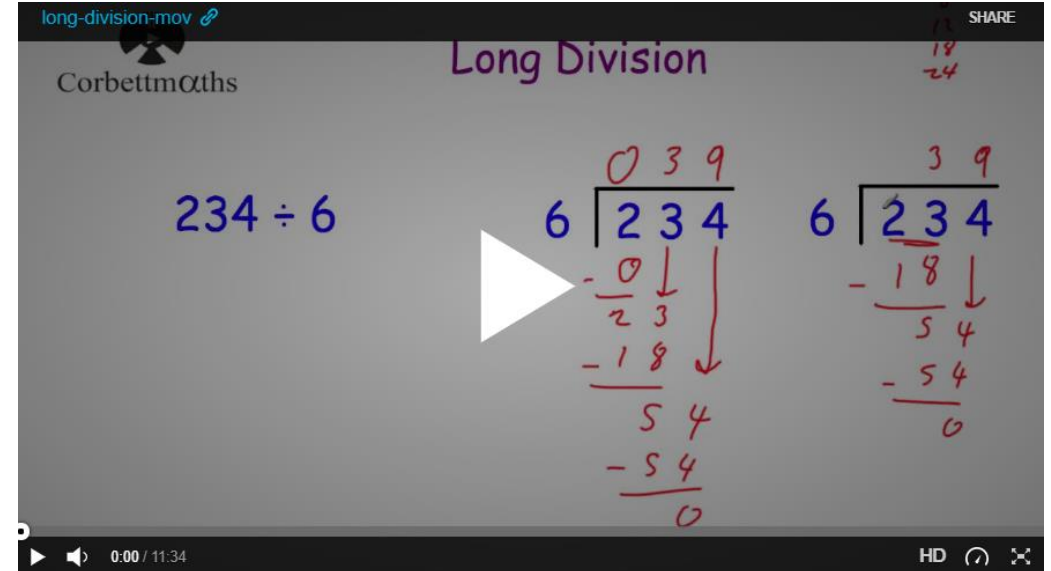
Division Video

SHORT DIVISION



<https://corbettmathsprimary.com/2018/05/30/division-video/>

LONG DIVISION



<https://corbettmathsprimary.com/2020/05/22/long-division-video/>



How can we solve this?

Write the missing numbers.

 $57 + \boxed{} = 125$

$5 \times \boxed{} = 175$

[2 marks]

Answers

Write the missing numbers.

 $57 + \boxed{} = 125$

$$5 \times \boxed{} = 175$$

[2 marks]

We already know that we have to add a number to 57 to = 125. So, we use this information...
 $125 - 57 = 68$. (Inverse)

Let's do the same again.

We know 5 times a number = 175.

So we use the inverse which is divide /.

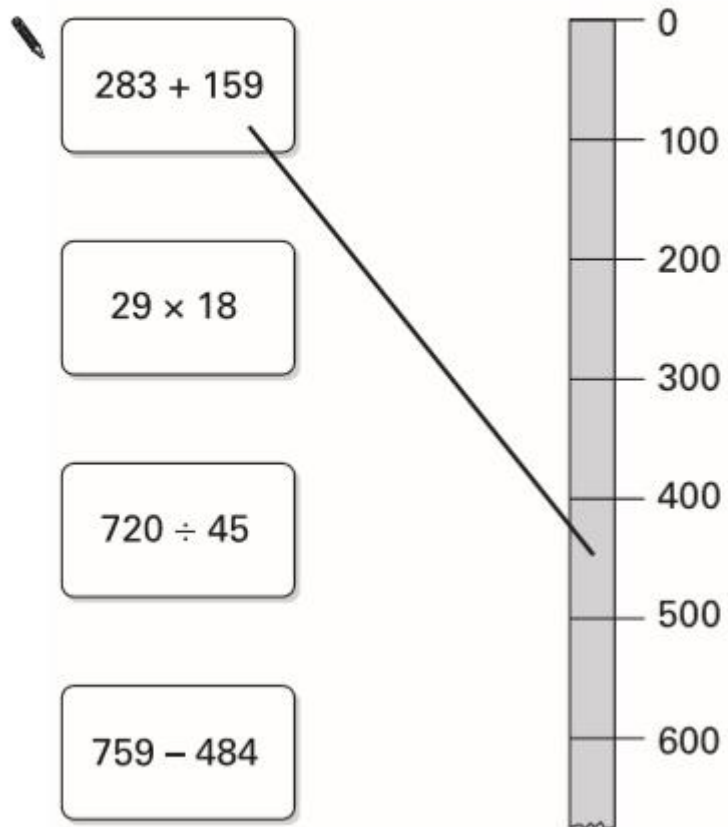
$$175 / 5 = 35$$



Types of questions

Draw a line from each card to the correct part of the number line.

One has been done for you.

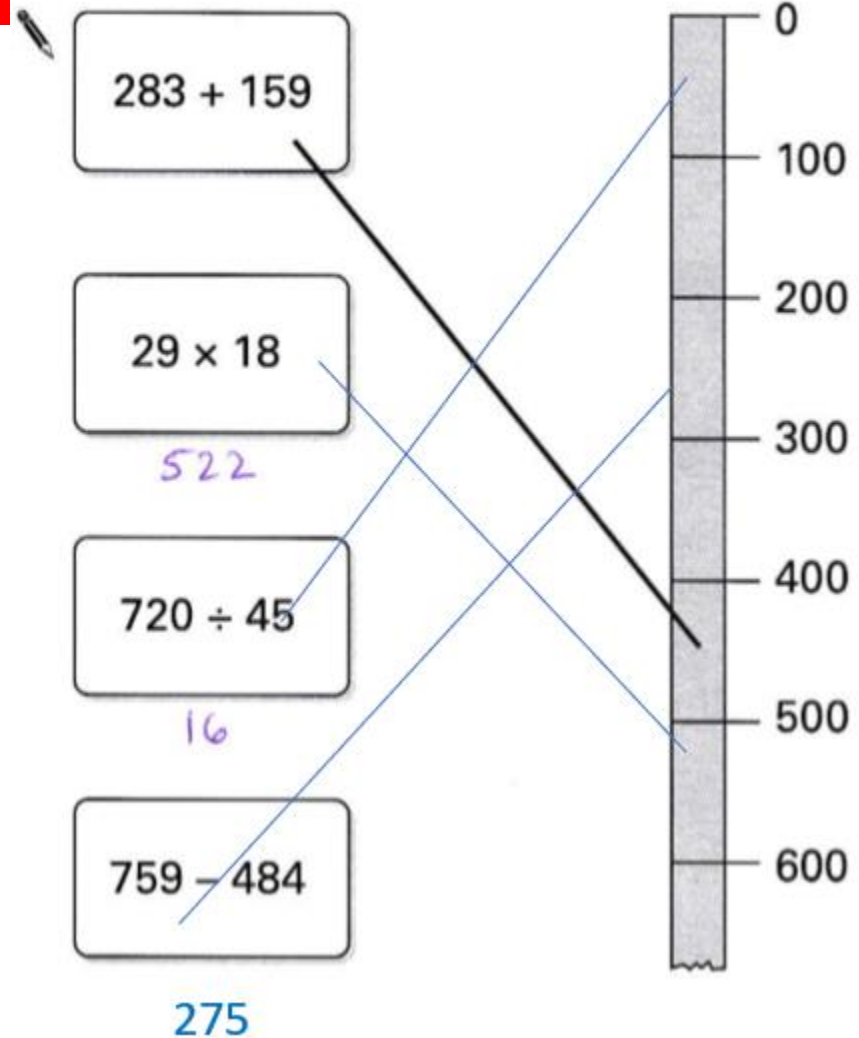


Find the answer to each calculation first.

And then decide where it goes on a number line.

Draw a line from each card to the correct part of the number line.

One has been done for you.



$$\begin{array}{r} 29 \\ \times 18 \\ \hline 232 \quad (\times 8) \\ 290 \quad (\times 10) \\ \hline 522 \end{array}$$

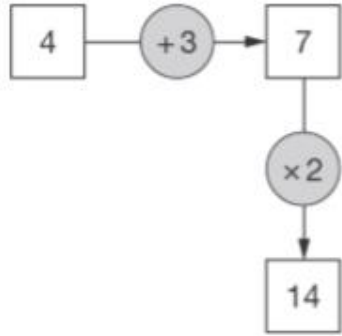
$$\begin{array}{r} 016 \\ 45 \overline{) 720} \\ \underline{45} \\ 270 \\ \underline{270} \\ \end{array}$$

$$\begin{array}{r} 6759 \\ -484 \\ \hline 275 \end{array}$$

Answers

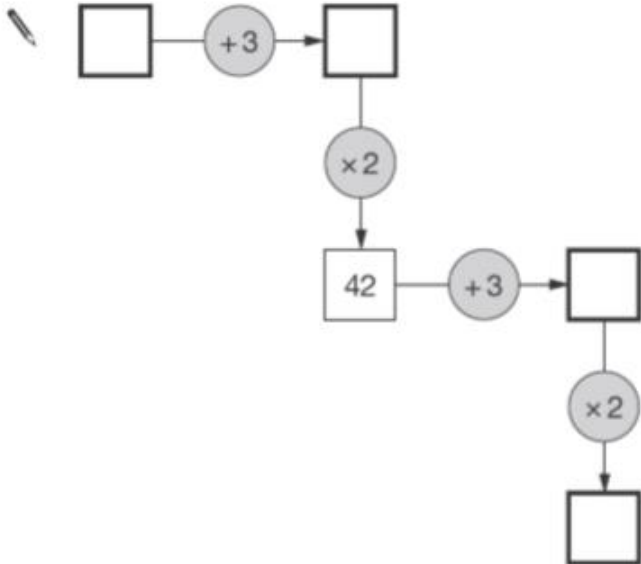
[2 marks]

Here is a number machine.



Here is another number machine.

Write the four missing numbers.



[2 marks]

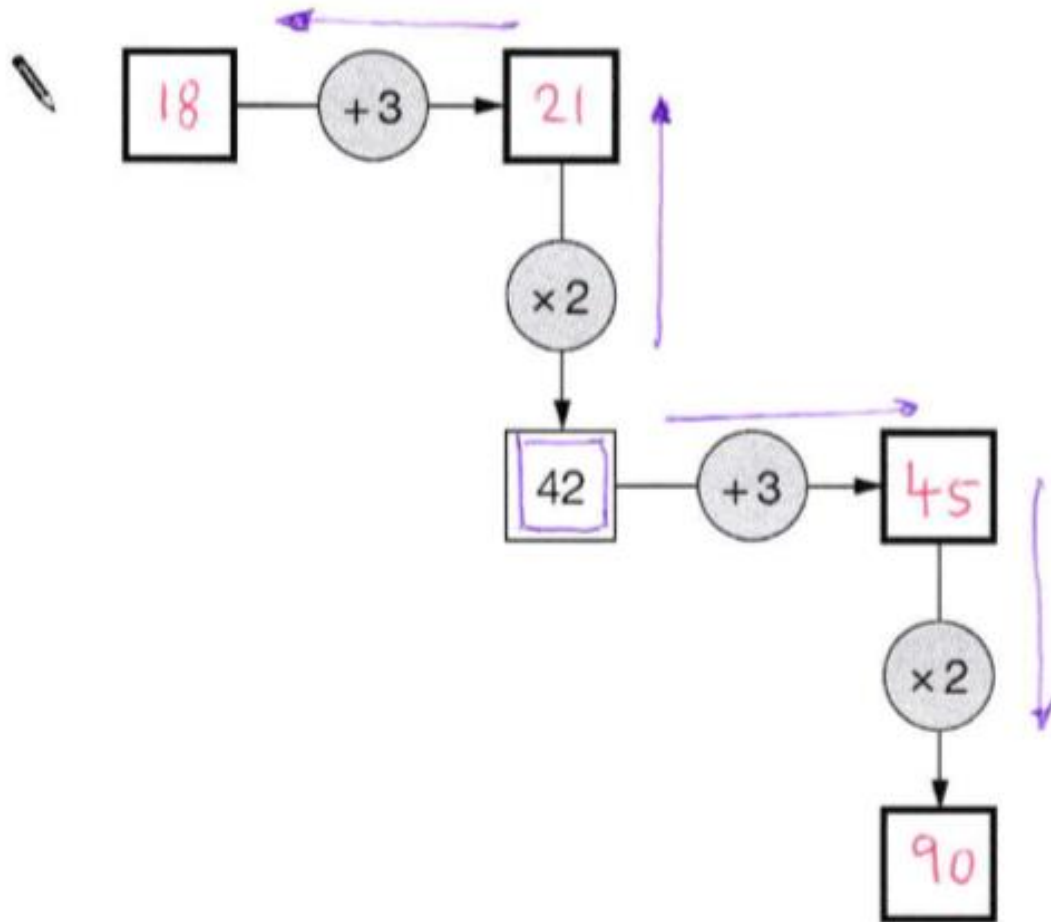


Types of Questions

Remember to use the inverse if you want to find part of a question that does not have the information already given.





Answers



Where has the inverse been used?

Using Calculations Video (extra)

place-value-operations-m4v  SHARE

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Place Value: Operations


Useful Skills:

- x/- 10, 100, 1000 etc
- Estimation ✓
- Multiplying Decimals

Given $84 \times 5.3 = 445.2$
write down the value of

$445.2 \div 84$ $445.2 \div 8.4$ $4.452 \div 0.53$

5.3



<https://corbettmathsprimary.com/2018/07/22/using-calculations-video/>

TASK

As this is Year 6 revision, to ensure you are prepared for Year 7, try your best to complete all of the questions!

Week 7_Maths_Lesson 1

Lesson 1 Reasoning and Problem Solving

L.O: I am learning to answer SATs questions involving the four operations.

Home Learning

Once you have finished turn this assignment in on Google Classroom.



Try your best – it is all we can ask for! 😊

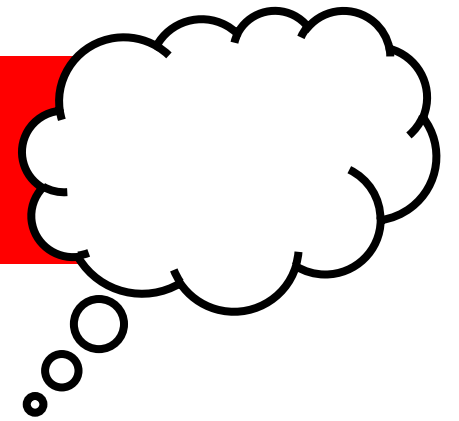
Key vocabulary: addition, subtraction, multiplication, division, calculate, find, missing, inverse, operation, reasoning, solve.	Your answer
<p>Join each of these calculations to the number that is nearest to the correct answer.</p> <p>One has been done for you.</p> <p>$110 + 230$ — 100</p> <p>$357 - 149$ — 200</p> <p>62×8 — 300</p> <p>$777 - 679$ — 400</p> <p>$801 - 444$ — 500</p> <p>[2 marks]</p>	
<p>Write in the missing numbers.</p> <p>$\square + 85 = 200$</p> <p>$4 \times \square = 120$</p> <p>$120 - 51 = \square$</p> <p>[2 marks]</p>	
<p>Write in the missing numbers.</p>	

School Work

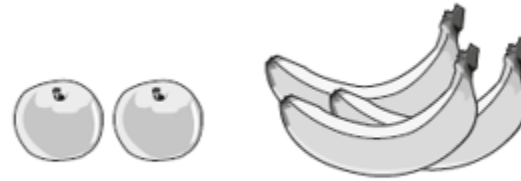
Once you have finished this assignment you will go through the answers as a class.

Self Mark

Evaluation



Chen buys 2 apples and 3 bananas.
He pays £2.35.



Megan buys 2 apples and 1 banana.
She pays £1.25.



How much does **one** banana cost?

Nrich – Further challenges

Chocolate Maths

Age 11 to 14 ★

This is cool chocolate maths!!!



1. First of all, pick the number of times a week that you eat chocolate. This number must be more than one but less than ten.
2. Multiply this number by 2 (just to be bold).
3. Add 5 (for Sunday).
4. Multiply it by 50.
5. Add 1750.
6. Add the last two digits from the year you last had a birthday. So if your last birthday was in 2009, add 9, if the your last birthday was in 2011 then add 11.
7. Now subtract the four digit year that you were born (if you remember).

You should now have a three digit number. The first digit will be your original number (i.e. how many times you eat chocolate each week). The next two digits give your age. Can you explain why it works?