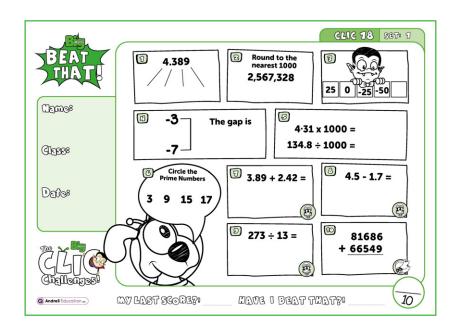


A Guide for Home Learning CLIC 18

Introduction - CLIC 18

In school, each week, children complete a CLIC challenge. The answers that they provide tell their teacher what skils they understand and allow teachers to focus on teaching the skills that they don't (as well as new skills that will be taught). If your child completes their challenges online at school, you may have been sent a link to log on at home. This pupil log on only allows children to complete one challenge a week. We are currently building a new pupil area, which will help with home learning.



This guide provides you with a copy of a CLIC challenge, a description of the skill each question is challenging and some sample resources for each question to help with home learning. (A description of each of these resources is on the next page.) The key is to keep it fun, no pressure and limit the time to less than 20 minutes a day, unless your child wants to carry on!

Please seek and follow advice from your child's teacher and school!

What skill does each question challenge?

Question 1 I can partition a 3 decimal place number

Question 2 I can understand 5, 6, 7, 8 digit numbers

Question 3 I can count along in 4 ways: -1s / -2s / -5s / -25s | -25s

Question 4 I can find the gap between 2 negative numbers

Question 5 I can multiply whole numbers and decimals by 1000

Question 6 I understand prime numbers

Question 7 I can solve any additions with 2 decimal place numbers

Question 8 I can subtract numbers with tenths

Question 9 I can combine 2 or more Coin Facts to solve division

Question 10 I can solve any 5 digit + 5 digit

Remember To's

Every step of learning (skill) in Big Maths has 'Remember to...'s. These are simple reminders for children to 'Remember to' do this, this, etc...

In Big Maths, we have divided complicated skills into small steps, provided 'Remember to...'s and examples to keep it simple for children.

A Progress Drive is a collection of skill steps that progress a child's learning to the point of mastering the larger objective.

Repeat Sheets

Repeat sheets contain a number of questions (usually 10) that you can use for repeat practice of a particular step. Please feel free to create your own repeat questions to avoid children simply memorising the questions and answers.

Revisit Sheets

Revisit sheets contain a number of questions (usually 10) that you can use which include a unit of measure applied to the numbers (It's Nothing New!) of a particular step. Please feel free to create your own revisit questions to avoid children simply memorising the questions and answers.

Real Life Maths Sheets

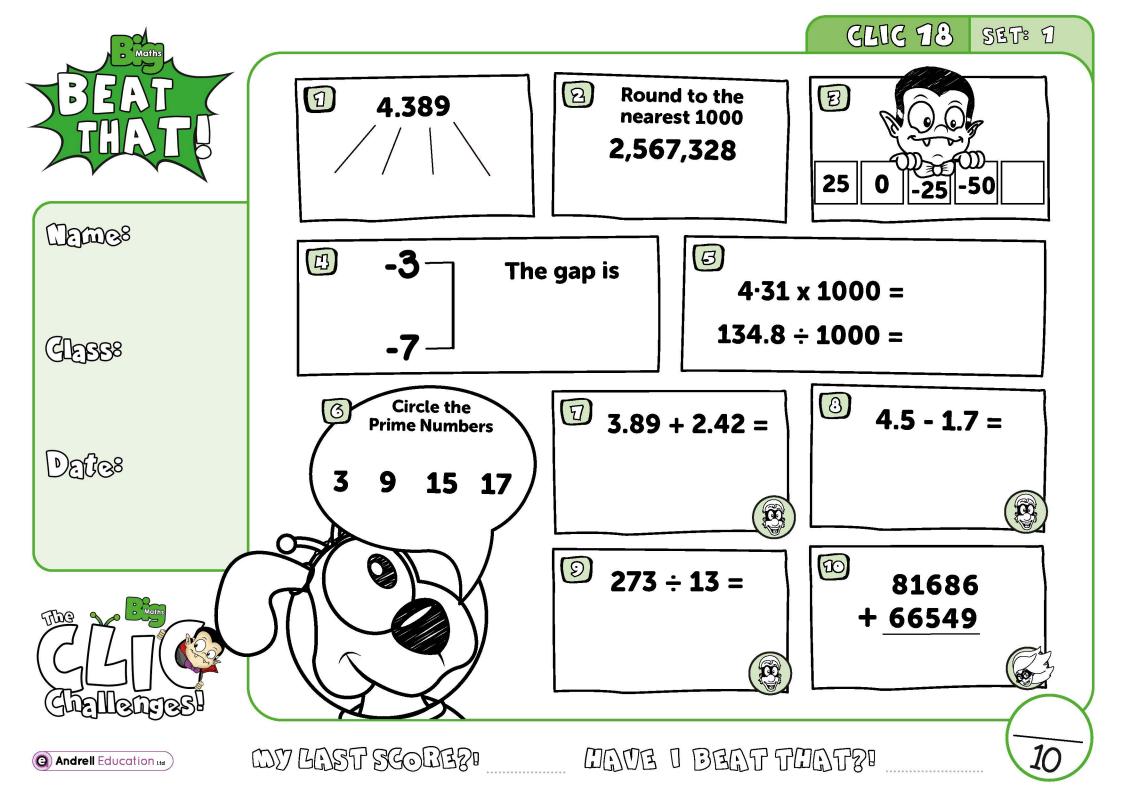
Real Life Maths sheets contain a number of questions (usually 5) where the questions have been placed into worded scenarios for a particular step, increasing the complexity and challenge further. Please feel free to create your own real life maths questions to avoid children simply memorising the questions and answers.

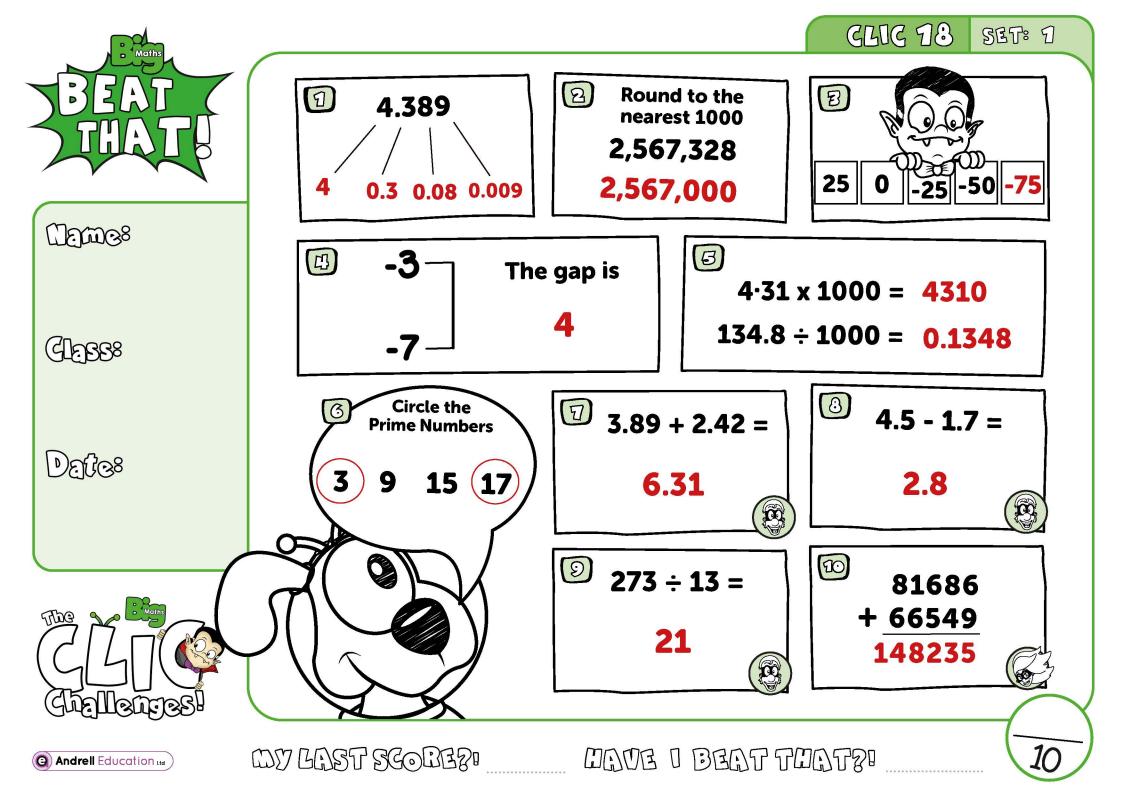
Select Sheets

Select sheets contain a number of worded questions (usually 5) which no longer automatically relate to the step we are on. These increase the complexity and challenge further still. Please feel free to create your own select questions to avoid children simply memorising the questions and answers.

CLIC 18

The following CLIC challenge is an example for you to use to practice at home. We have included the answer sheet as well. Please feel free to create your own additional questions by changing the numbers for any that your child gets wrong. In this pack, there is additional advice for each question, with resources that can help with home learning. It is important that you use the correct challenge level as provided by your teacher.





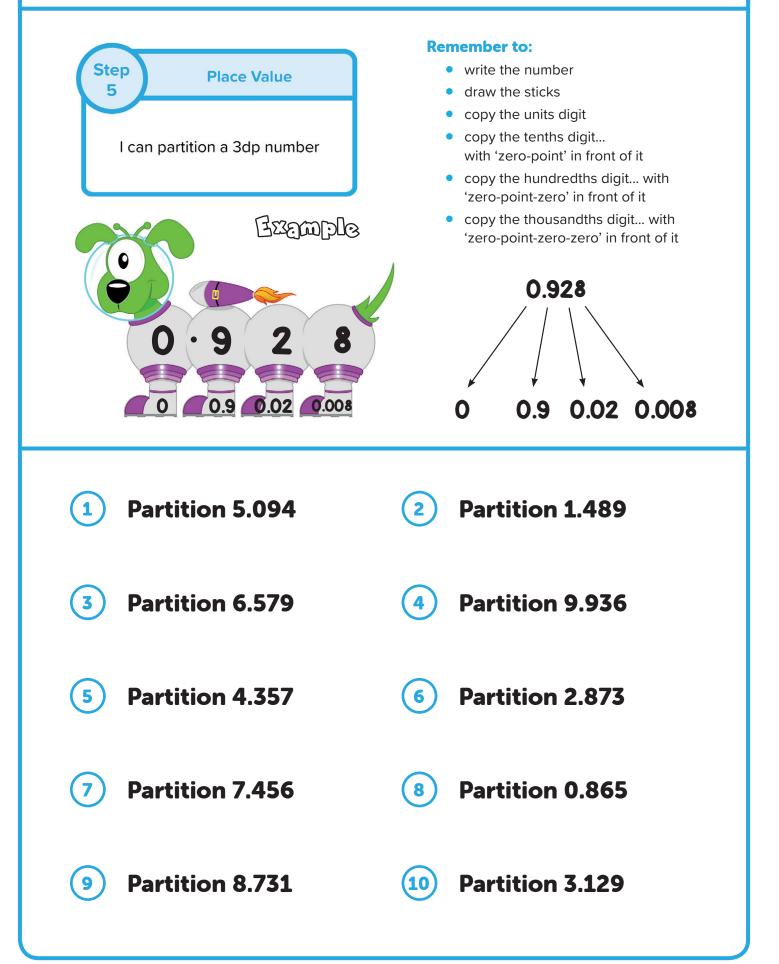
Question 1 - I can partition a 3 decimal place number

Remember to:

- write the number
- draw the sticks
- copy the units digit
- copy the tenths digit with 'zero-point' in front of it
- copy the hundredths digit with 'zero-point-zero in front of it
- copy the thousandths digit with 'zero-point-zero-zero' in front of it



Repeat Questions





Repeat Answers

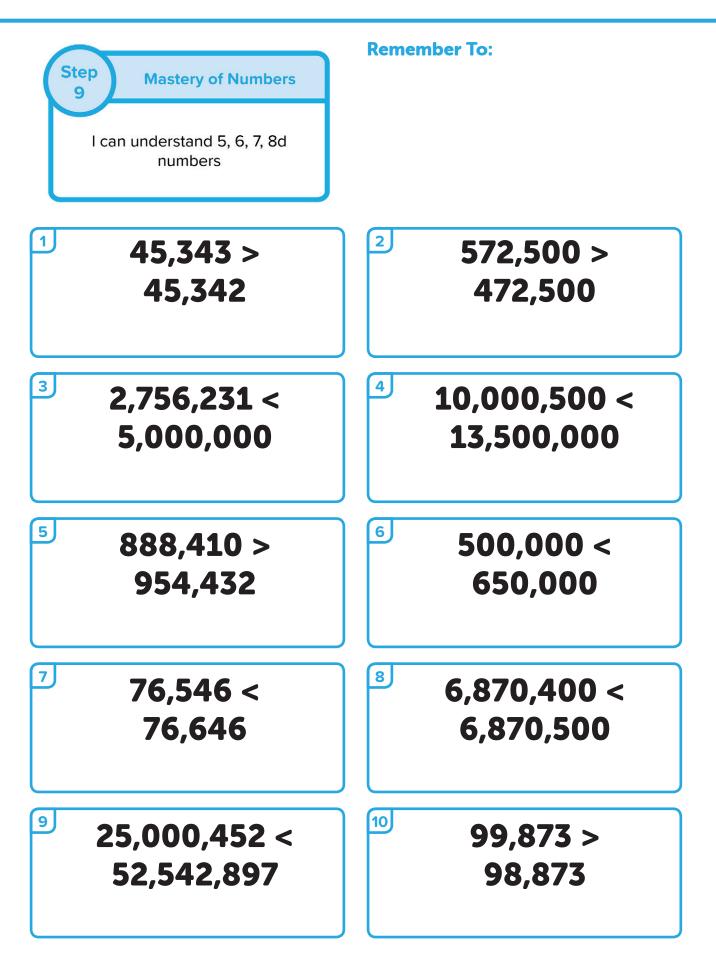
Remember to:	
Step Place Value	• write the number
5	 draw the sticks
	 copy the units digit
I can partition a 3dp number	 copy the tenths digit
	with 'zero-point' in front of it
	 copy the hundredths digit with
	'zero-point-zero' in front of it
Example	 copy the thousandths digit with 'zero-point-zero-zero' in front of it
	0.000
	0.928
0.928	
	¥ ¥ ¥ ¥
0.02 0.08	0 0.9 0.02 0.008
(1) 5, 0.0, 0.09, 0.004	2 1, 0.4, 0.08, 0.009
3, 0.0, 0.09, 0.004	
3 6, 0.5, 0.07, 0.009	(4) 9, 0.9, 0.03, 0.006
5 4 0 3 0 05 0 007	
5 4 , 0.3, 0.05, 0.007	 6 2, 0.8, 0.07, 0.003
5 4 , 0.3, 0.05, 0.007	
	 6 2, 0.8, 0.07, 0.003
 5 4, 0.3, 0.05, 0.007 7, 0.4, 0.05, 0.006 	
	 6 2, 0.8, 0.07, 0.003
	 6 2, 0.8, 0.07, 0.003
7, 0.4, 0.05, 0.006	 6 2, 0.8, 0.07, 0.003 8 0, 0.8, 0.06, 0.005
	 6 2, 0.8, 0.07, 0.003
7, 0.4, 0.05, 0.006	 6 2, 0.8, 0.07, 0.003 8 0, 0.8, 0.06, 0.005

Question 2 - I can understand 5, 6, 7 and 8 digit numbers

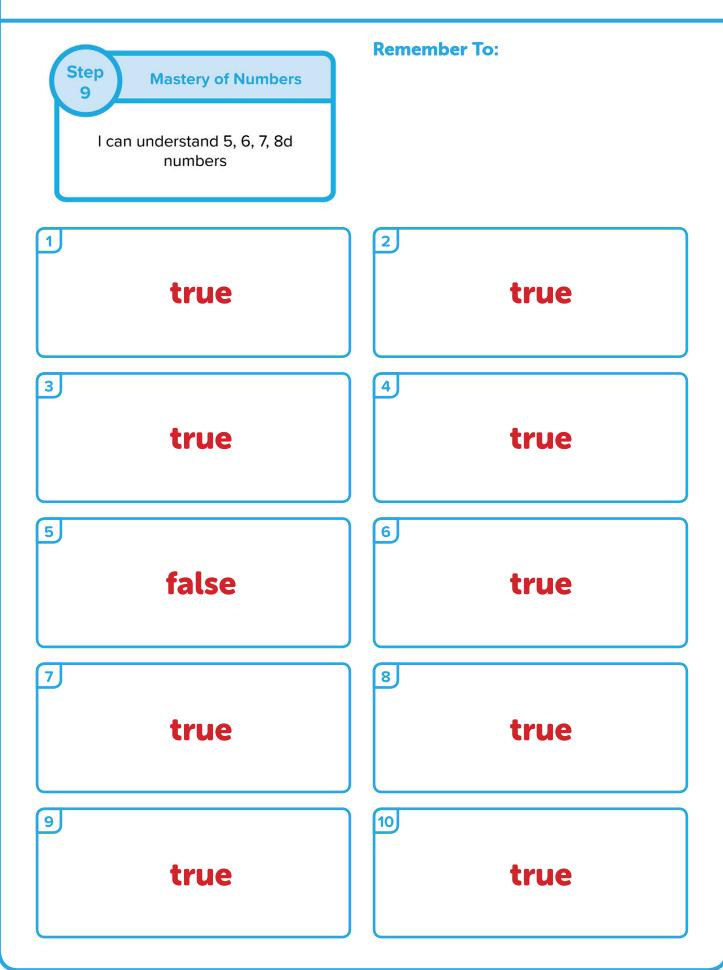
Remember to:

- compare the value of the digits furthest to the left
- only if they have the same value, move on to compare the next digit along and so on





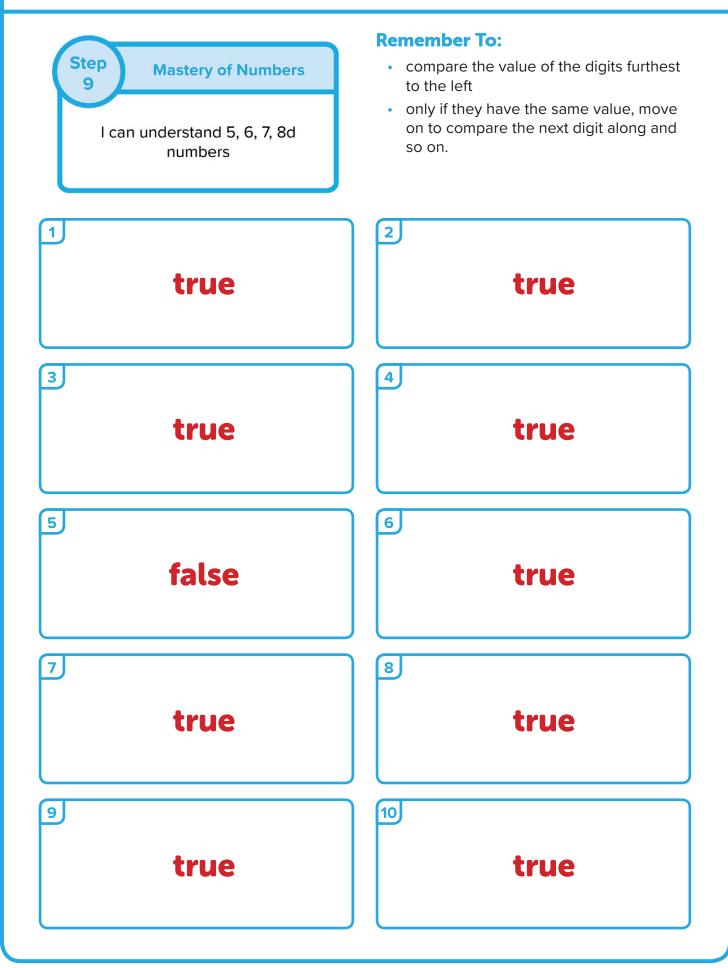








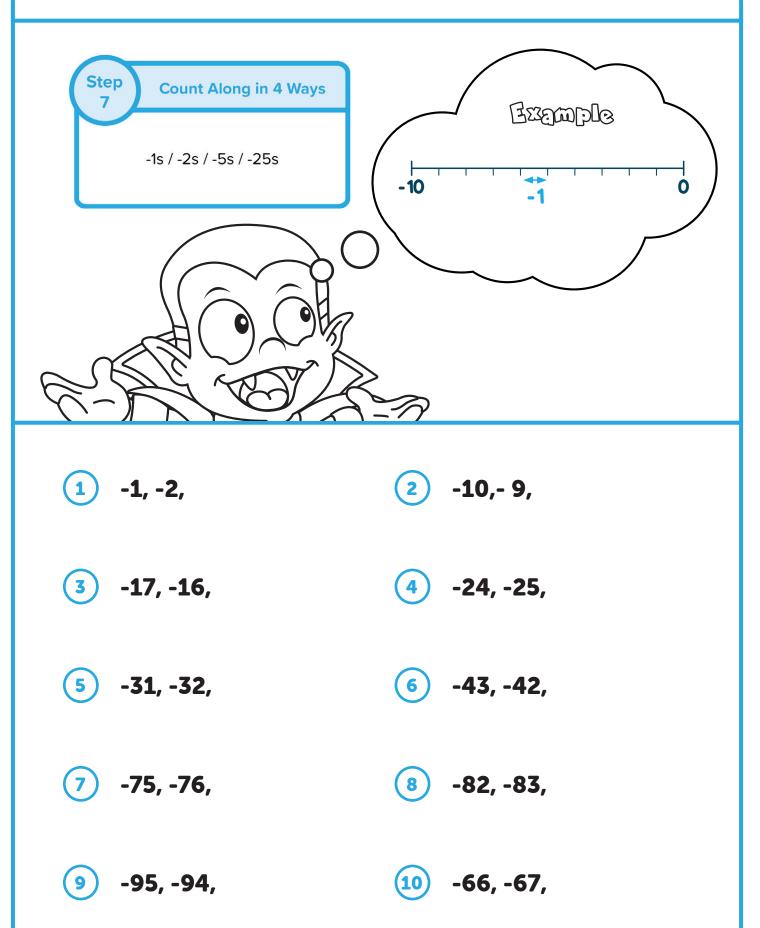




Question 3 - I can can count along in 4 ways: -1s / -2s / -5s / -25s | -25s

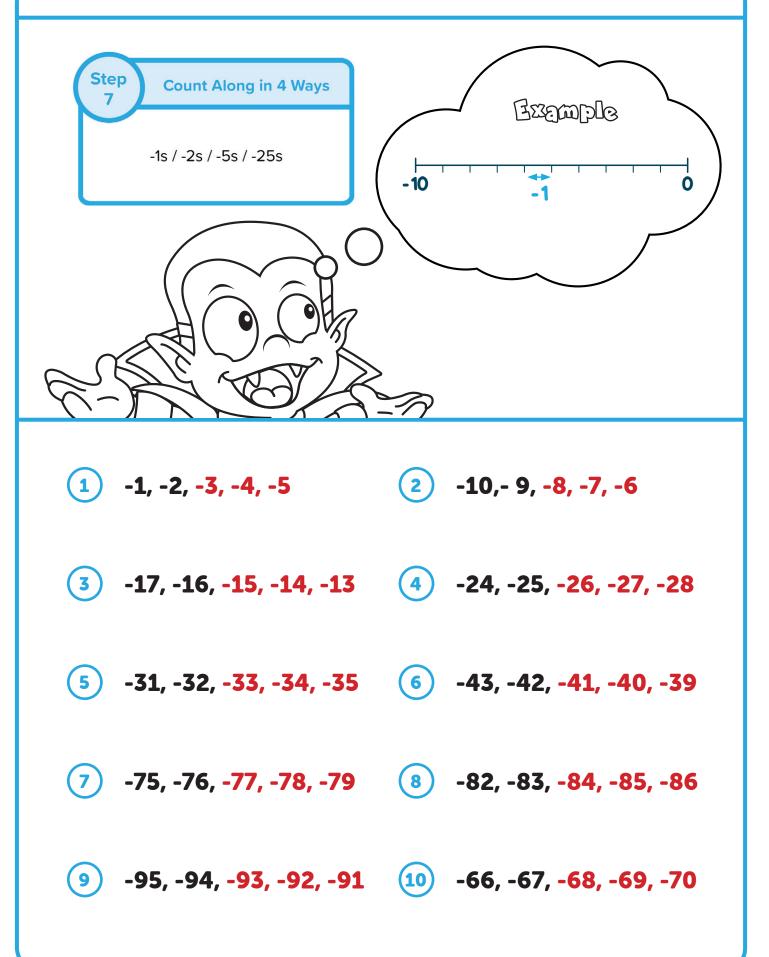


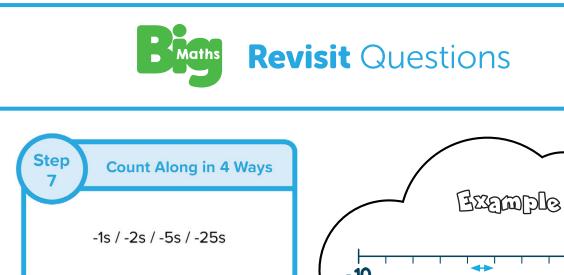
Repeat Questions

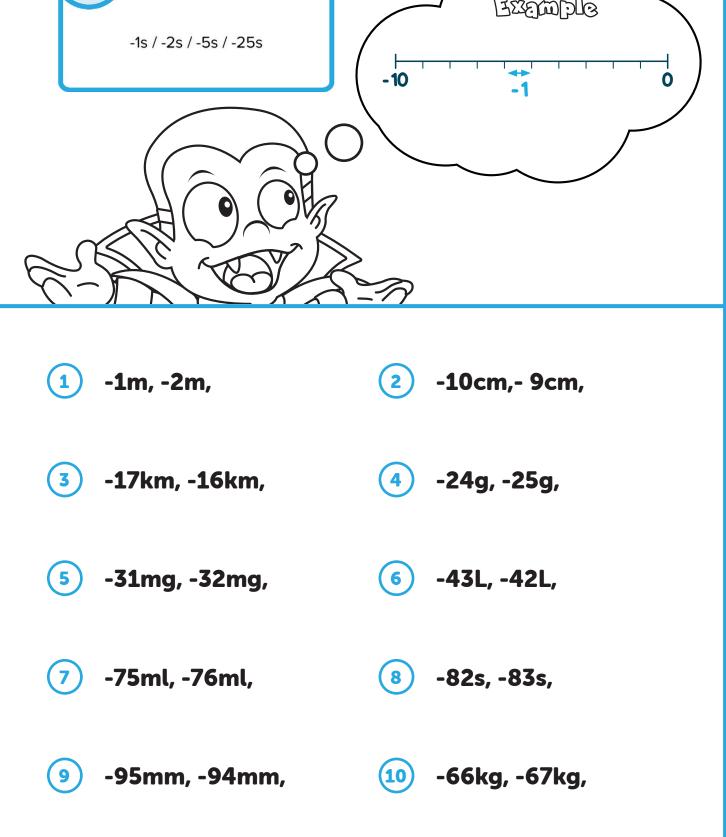


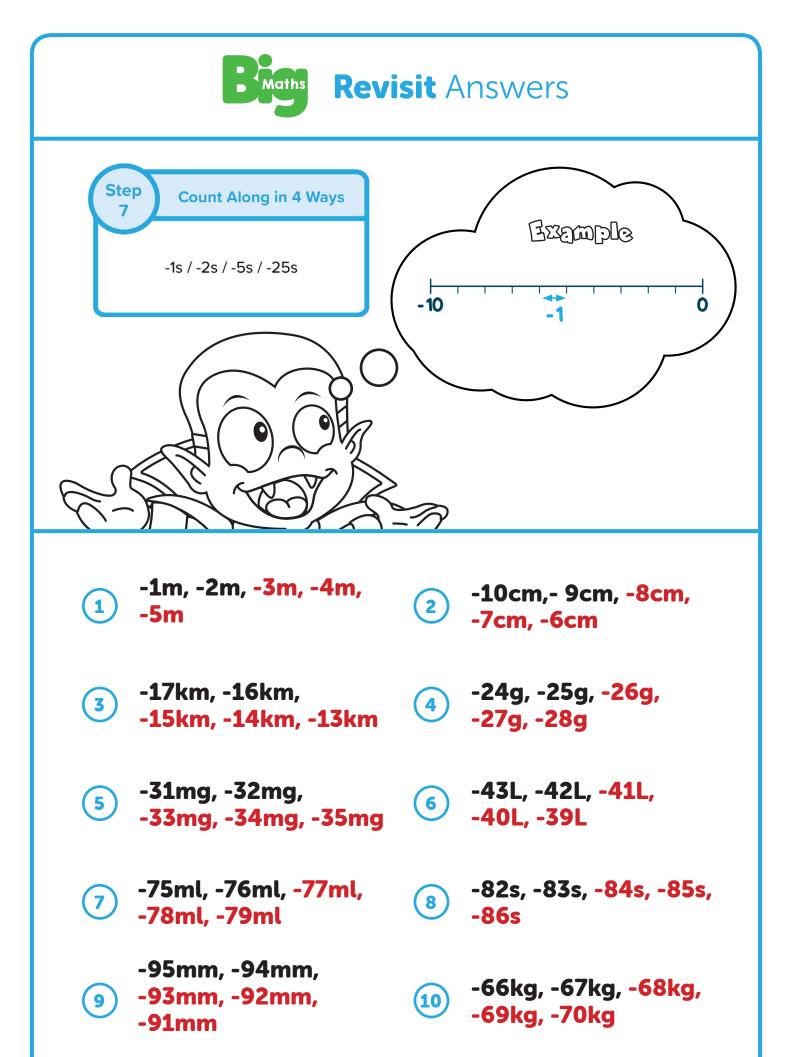


Repeat Answers









Question 4 - I can find the gap between 2 negative numbers

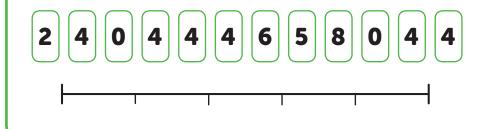




The 'Pim vs Pom' game is applicable to all the steps in the Counting Along Progress Drive, with the jumps and start and end points varied according to the context.

Steps 1 - 5

- 1. Can you find two numbers with a gap of 3?
- **2.** Count along number lines with familiar number of divisions, but unexpected end values e.g. 20 to 40 with 4 divisions.
- **3.** Use all of these digit cards to label the values of the marked divisions on this number line;



4. Mark and **label 5 more** numbers that are not already shown on this number line.



Step 6

- 1. On a single number line -20 to 20 draw the gaps between -12 and -8, and 12 and 8. What do you notice?
- 2. The gap between my **two numbers is 6**. They are both **negative**. What numbers could they be?

Step 7

- 1. Which number is the same distance from -6 and 4?
- 2. What number is half way between 12 and -2?
- **3.** One of my **numbers is 3. The other is 7 away**. What could the other number be?
- 4. In my office block, the entrance is on the Ground Floor. You can go 17 floors up in the lift, and then there are 5 even higher floors that you can only access using a staircase. There is also a basement below the ground floor. On the day when the lift is not working, is it quicker to walk from my desk on the 11th floor to a cafe in the basement, or to the one on the top floor?

Question 5 - I can multiply whole numbers and decimals by 1000

Remember to:

- move the digits three places to the left
- remember that this makes the number 1000 times bigger



















Step

5

1

2

3

4

Real Life Maths Questions

Multiplying by 10

I can multiply whole numbers and decimals by 1000

Remember to:

- move the digits three places to the left
- remember that this makes the number 1000 times bigger

Pim has 1000 boxes. Each box has 2.6kg of plums. How many kilograms of plums are there in total?

There are 1000 people at a party. Each person gets 1.2L of juice. How much juice is there in total?

A packet of stickers costs £1.50. Pim buys 1000 packets. How much does that cost?

Pim ran 1000 laps of 8.2km. How far did he run in total?

5

What is 6.7 multiplied by 1000?



Step

5

1

2

3

4

Real Life Maths Answers

Multiplying by 10

I can multiply whole numbers and decimals by 1000

Remember to:

- move the digits three places to the left
- remember that this makes the number 1000 times bigger

Pim has 1000 boxes. Each box has 2.6kg of plums. How many kilograms of plums are there in total?

There is 2600kg of plums.

There are 1000 people at a party. Each person gets 1.2L of juice. How much juice is there in total?

There is 1200L of juice.

A packet of stickers costs £1.50. Pim buys 1000 packets. How much does that cost?

It costs £1500.

Pim ran 1000 laps of 8.2km. How far did he run in total?

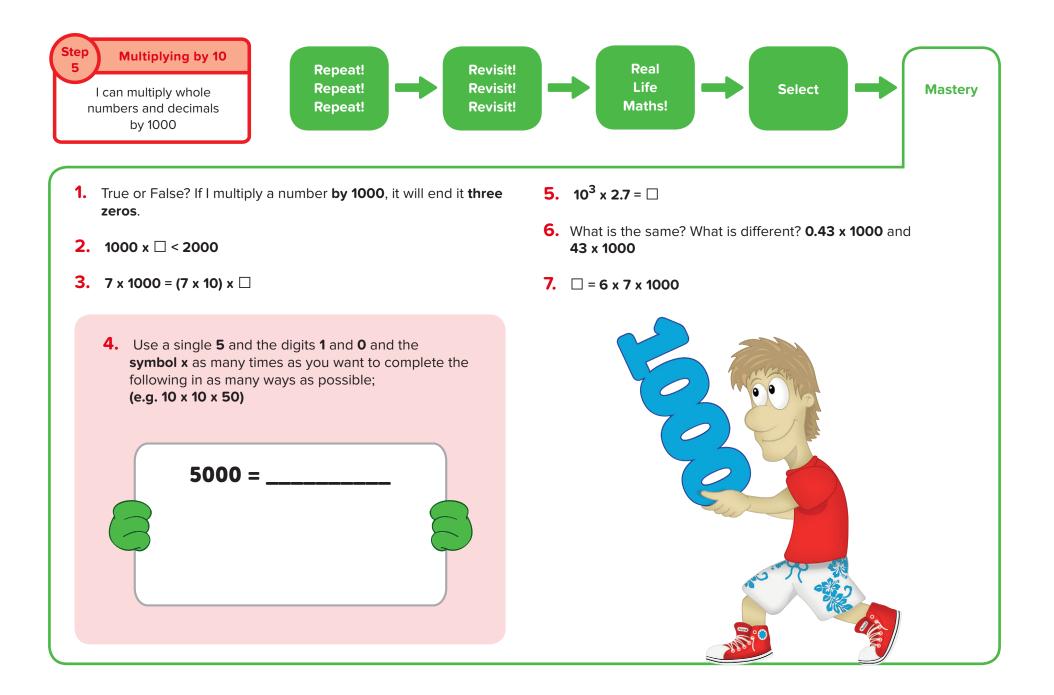
He ran 8200km.

5

What is 6.7 multiplied by 1000?

The answer is 6700.

It's Nothing New: Multiplying by 10

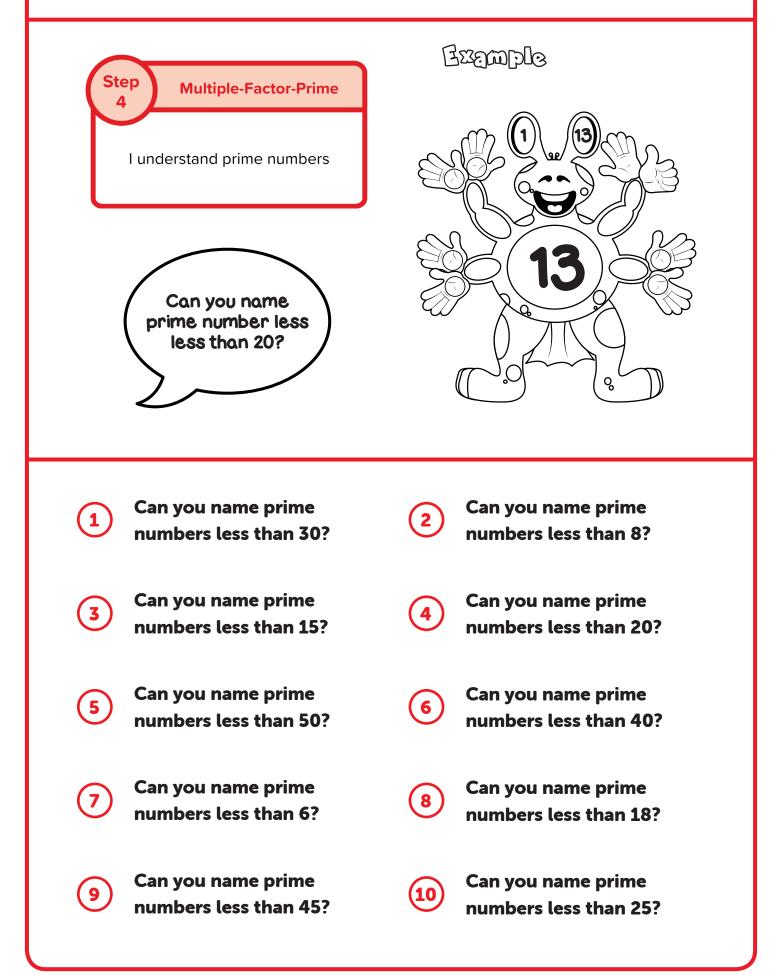


Big Maths: Mastery Activities

Question 6 - I understand prime numbers

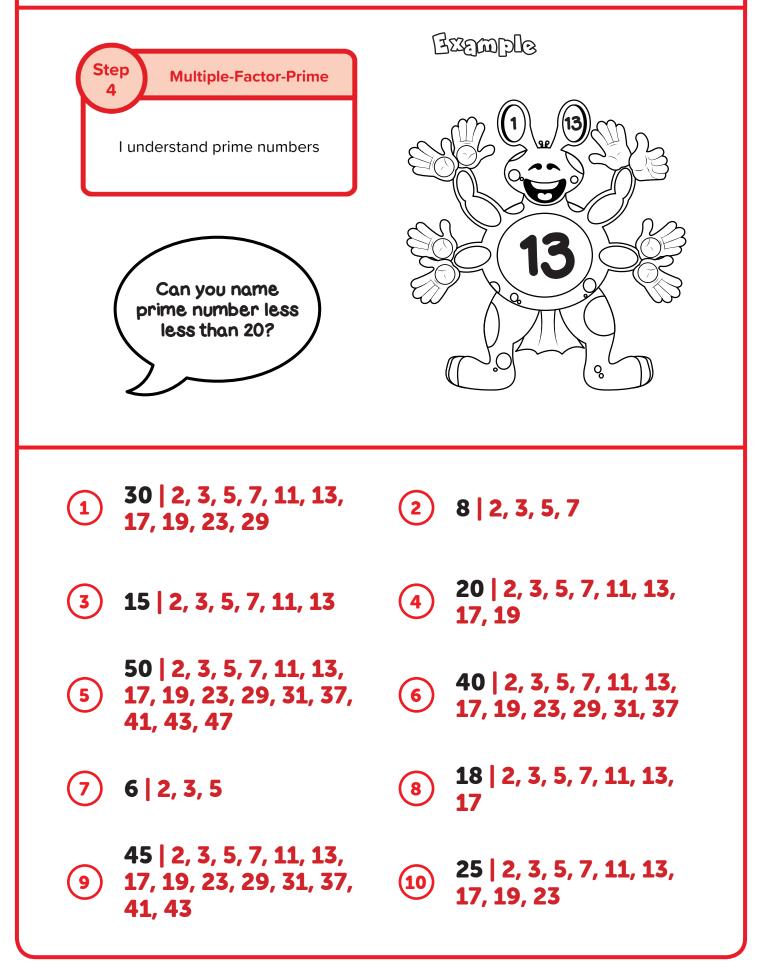


Repeat Questions





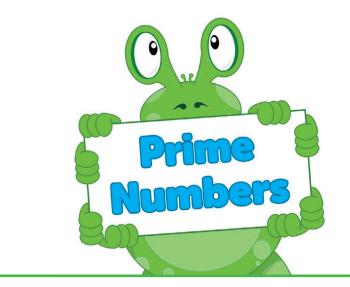
Repeat Answers



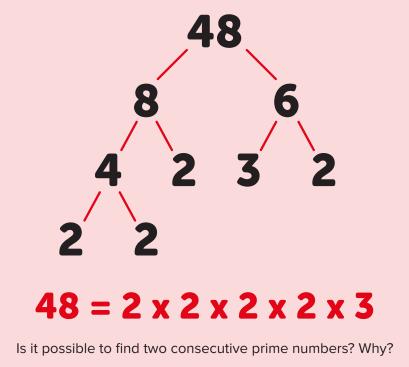
It's Nothing New: Pom's Words



- 1. Are prime numbers always odd? Are odd numbers always prime?
- 2. Which numbers in this list are **composite numbers**, which means they are **NOT prime? 7**, 9, 11, 15, 17, 19, 21
- **3.** Can you make a **rectangle** from a prime number of cubes?
- **4.** True or False? For any prime number, the number **one more than** the prime number always has **more factors** than the number **one less than** it. e.g. 23 is prime, 24 has more factors than 22. Prove it!



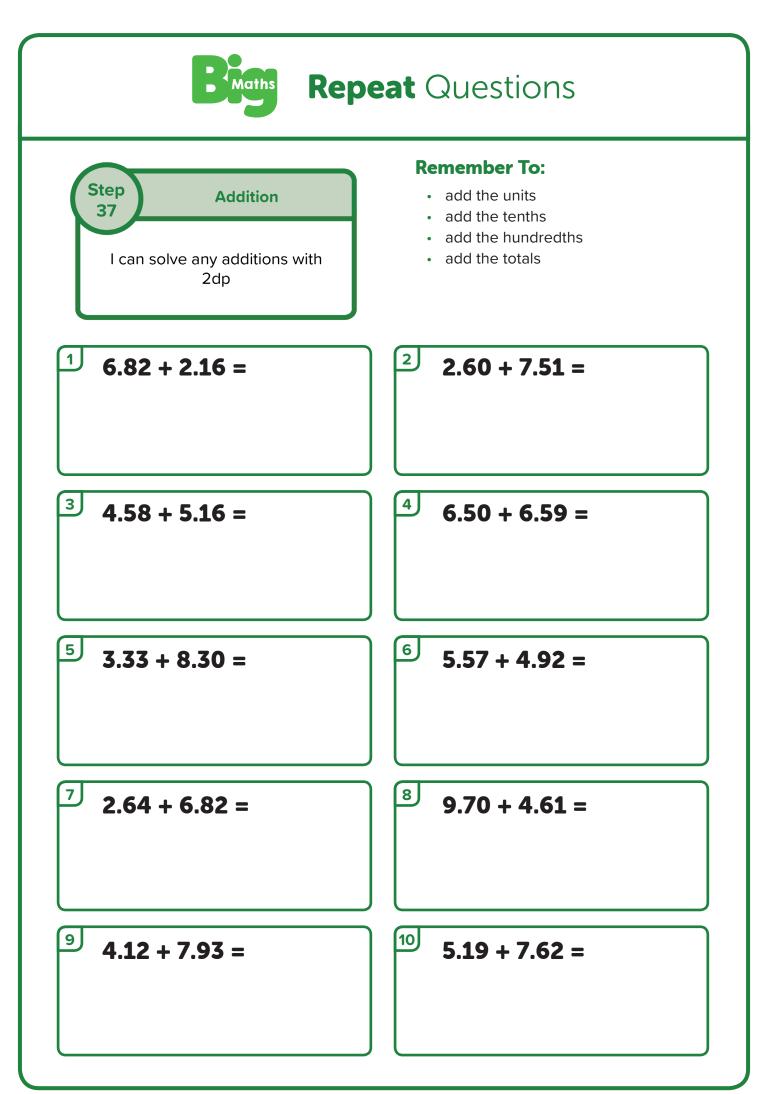
5. Here are the prime factors of 48. What are the prime factors of 36? What prime factors do they have in common?

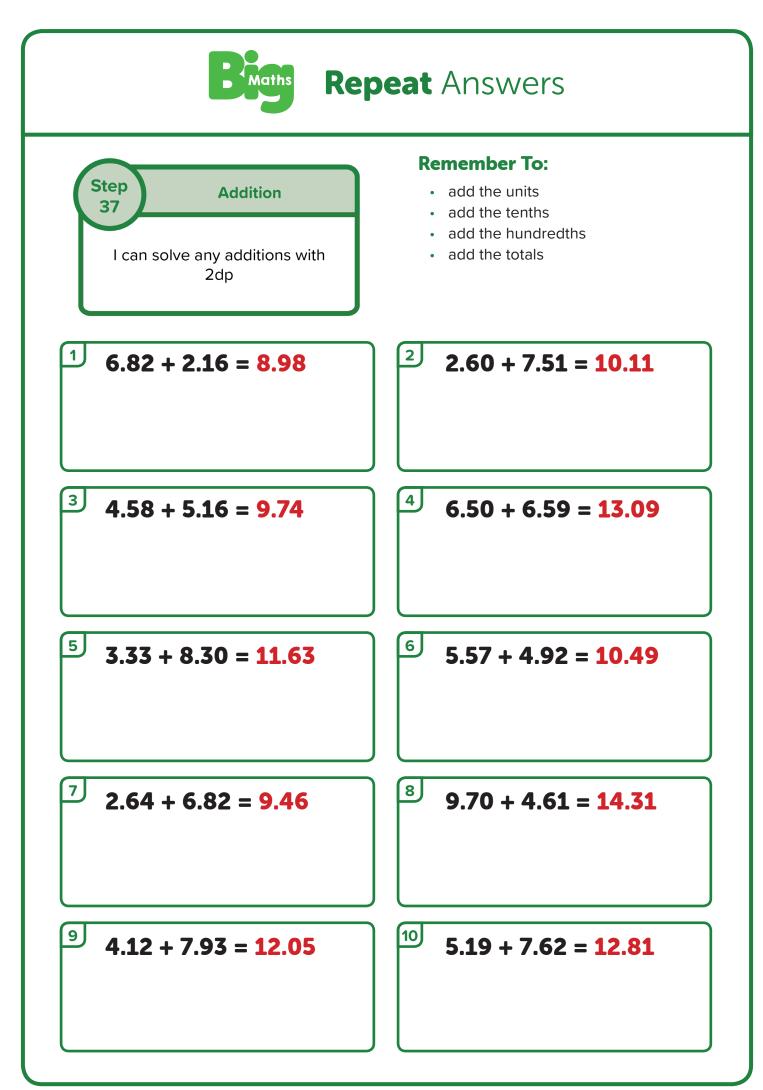


Question 7 - I can solve any additions with 2 decimal places

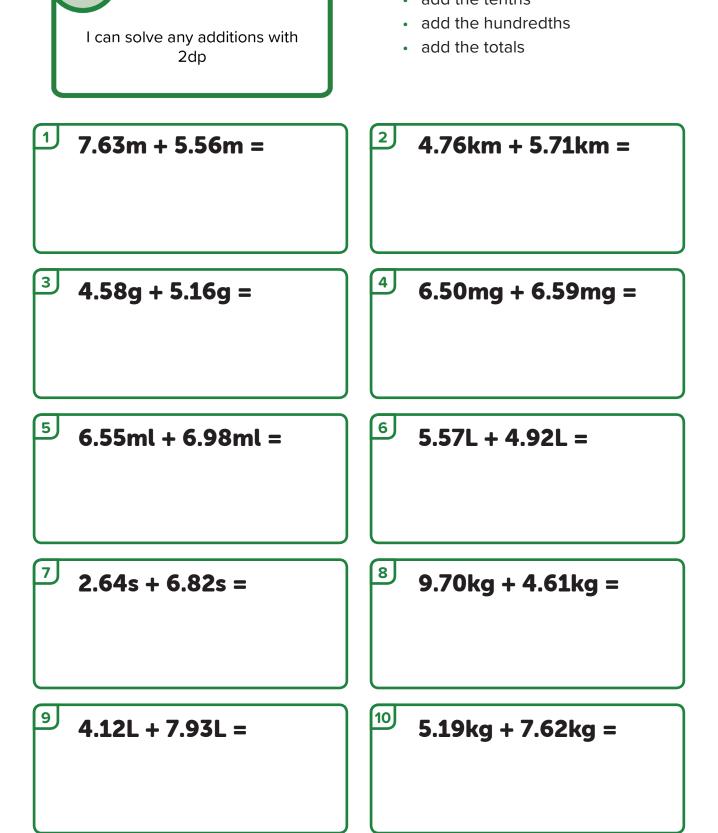
Remember to:

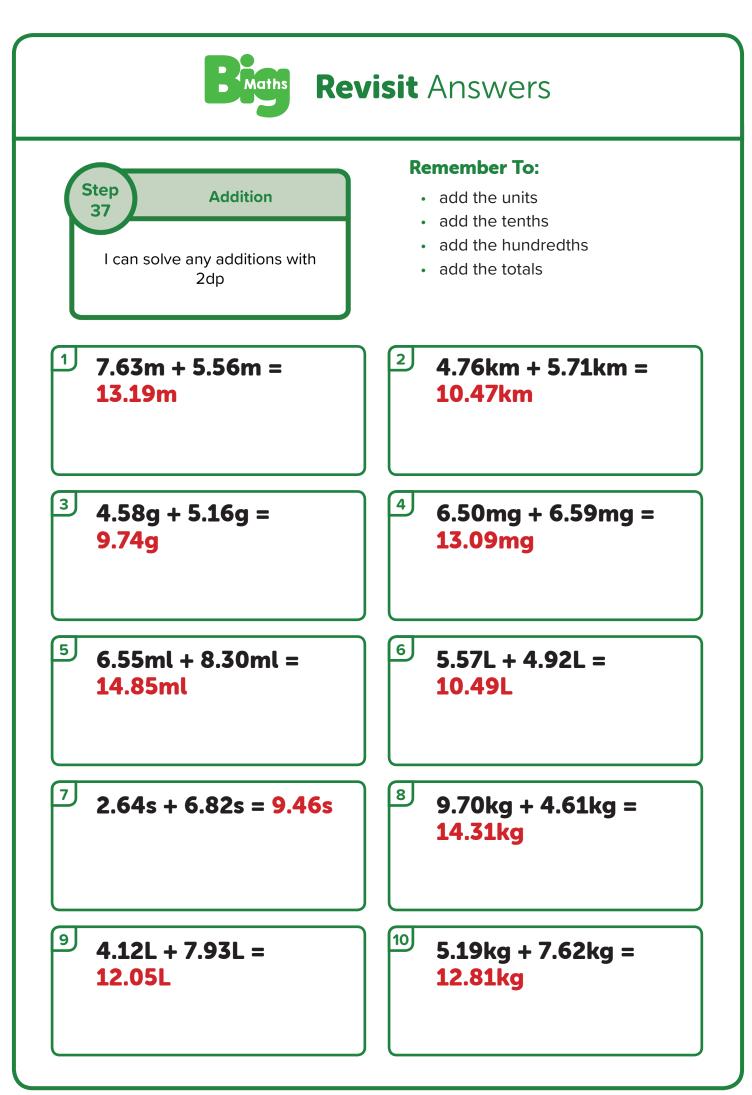
- add the units
- add the hundredths
- add the tenths
- add the totals





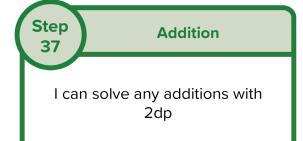








Real Life Maths Questions

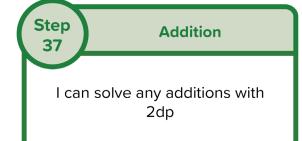


Remember to:

- add the ones (units)
- add the tenths
- add the hundredths
- add the totals

1 Pim has £8.68 and his friend gives him £7.39 more. How much does Pim have? **2**] There are 4.77kg of cherries in one jar and 7.34kg of cherries in another jar. How many kilograms of cherries are there altogether? **3** Pom is 9.13m tall. Pim 9.51m tall. How tall are they together? **4** Pim has 8.99L of lemonade in a jug. He adds 9.42L more. How much liquid is in the jug? 5 J What is 7.48 add 3.64?





1

2 J

3 J

4

5 J

Remember to:

- add the ones (units)
- add the tenths
- add the hundredths
- add the totals

Pim has £8.68 and his friend gives him £7.39 more. How much does Pim have?

Pim has £16.07.

There are 4.77kg of cherries in one jar and 7.34kg of cherries in another jar. How many kilograms of cherries are there altogether? There are 12.11kg of cherries altogether.

Pom is 9.13m tall. Pim 9.51m tall. How tall are they together?

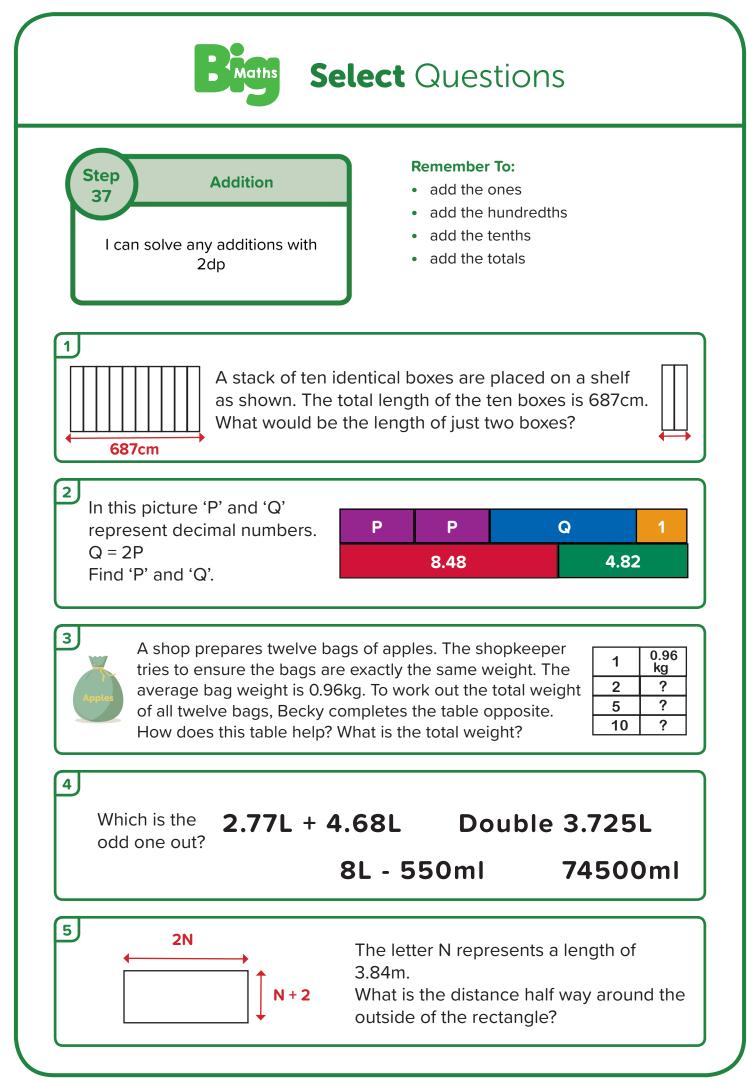
They are 18.64m tall together.

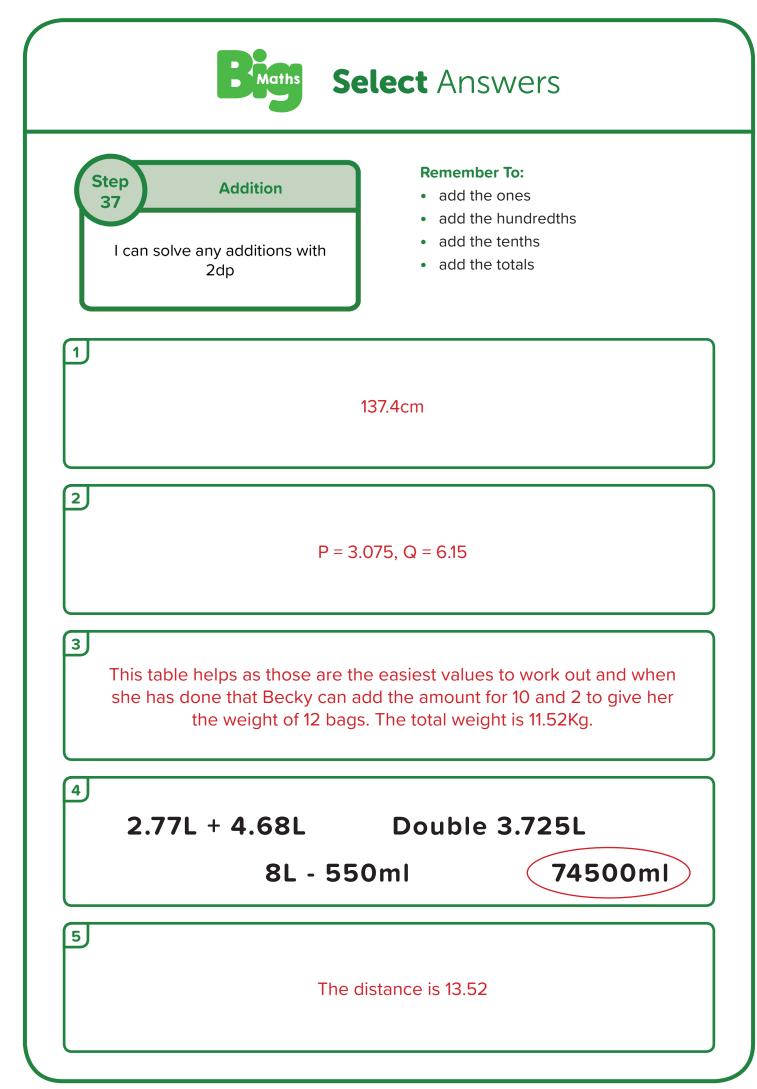
Pim has 8.99L of lemonade in a jug. He adds 9.42L more. How much liquid is in the jug?

There is 18.41L of lemonade in the jug.

What is 7.48 add 3.64?

The answer is 11.12.

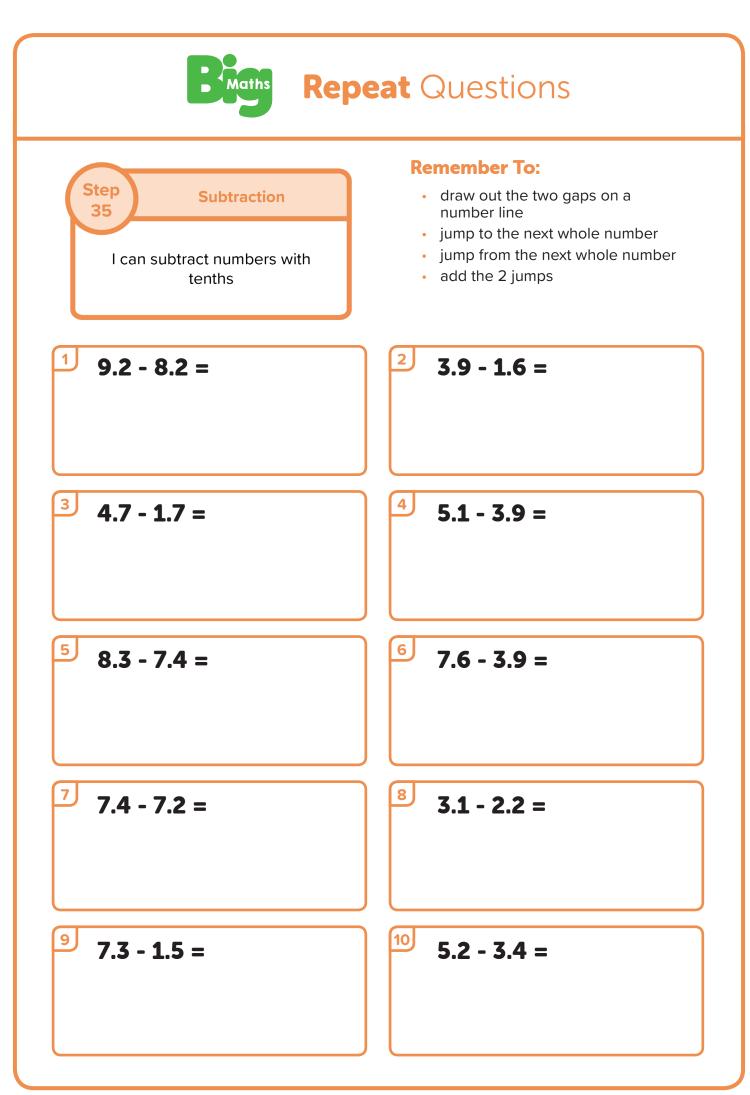


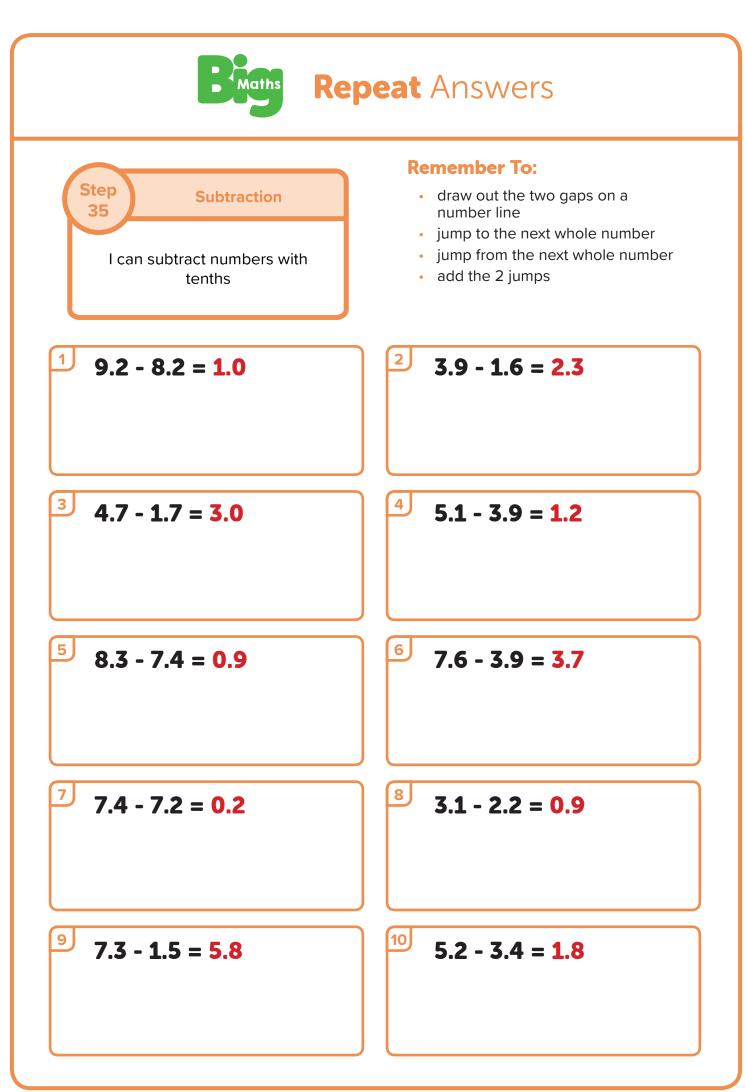


Question Practice Resources

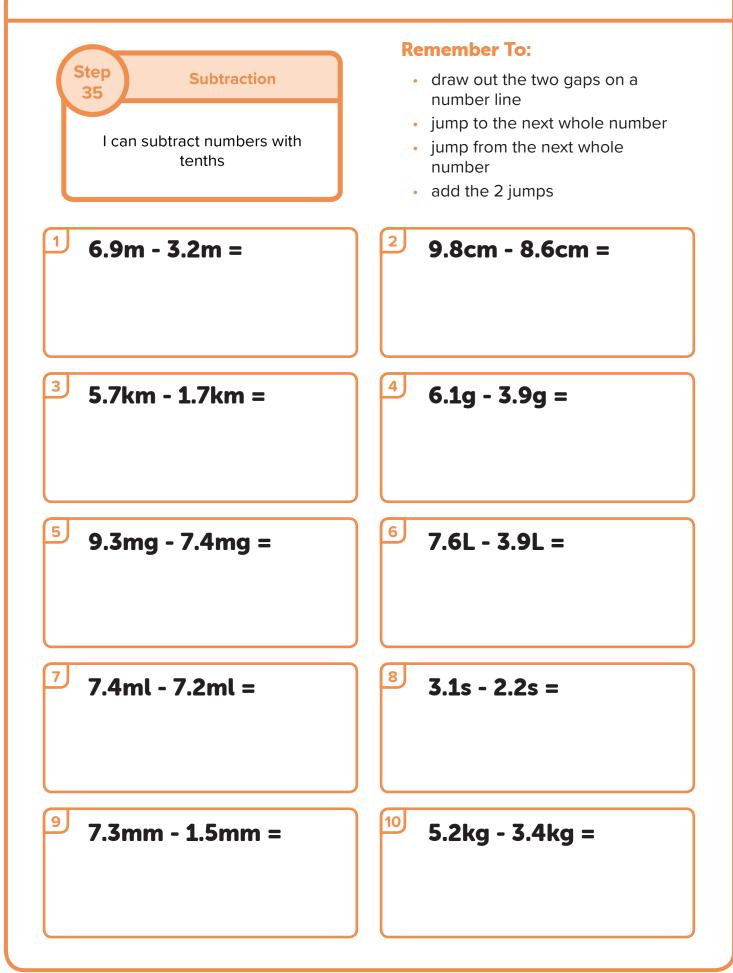
Question 8 - I subtract numbers with tenths

- draw out the 2 gaps on a number line
- jump to the next whole number
- jump from the next whole number
- add the two jumps

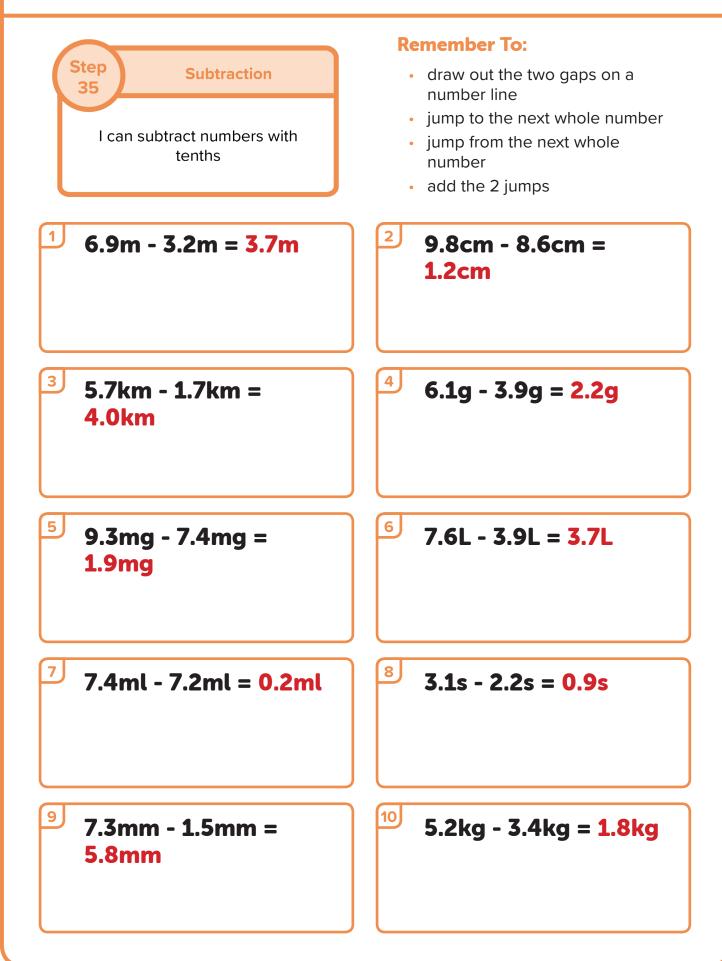






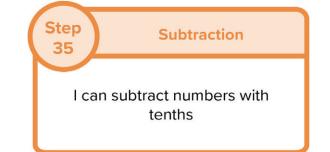




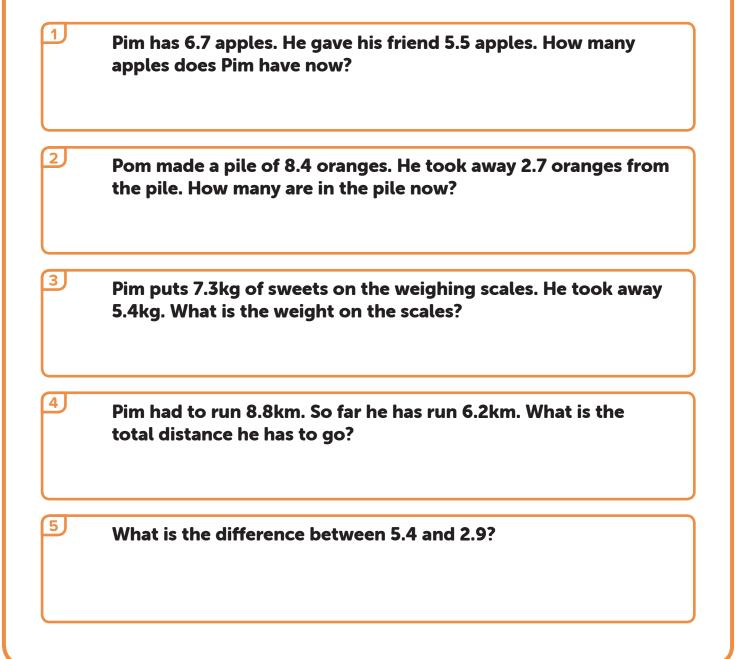




Real Life Maths Questions

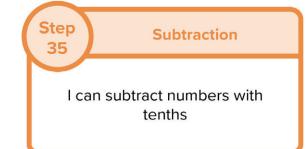


- draw out the 2 gaps on a number line
- jump to the next whole number
- jump from the next whole number
- add the 2 jumps

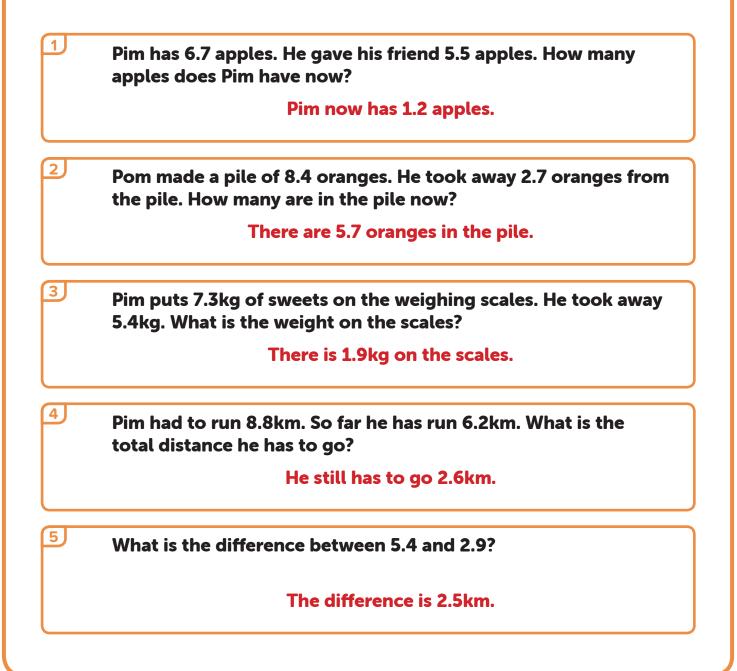


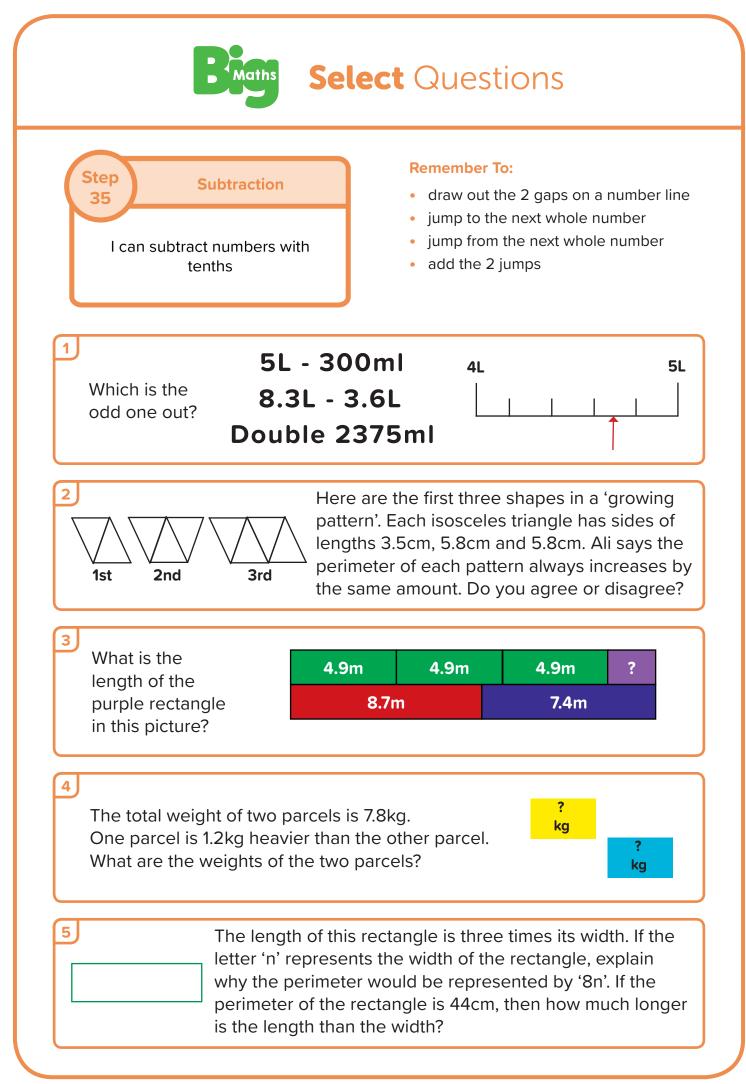


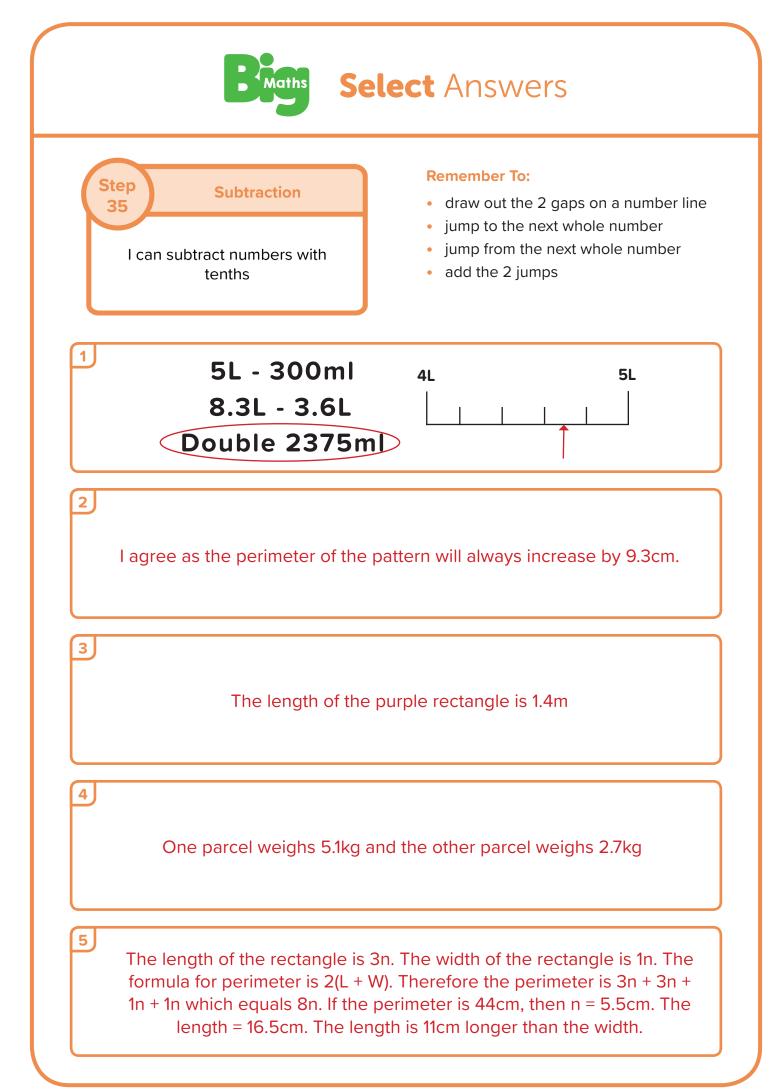
Real Life Maths Answers



- draw out the 2 gaps on a number line
- jump to the next whole number
- jump from the next whole number
- add the 2 jumps



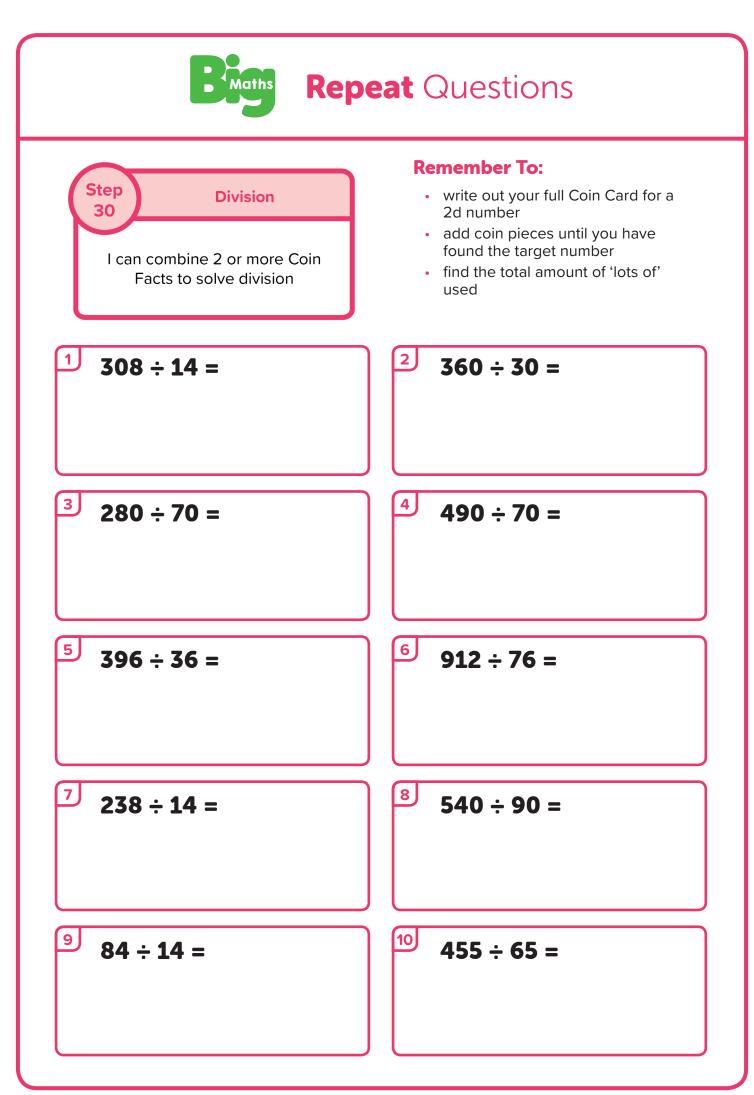


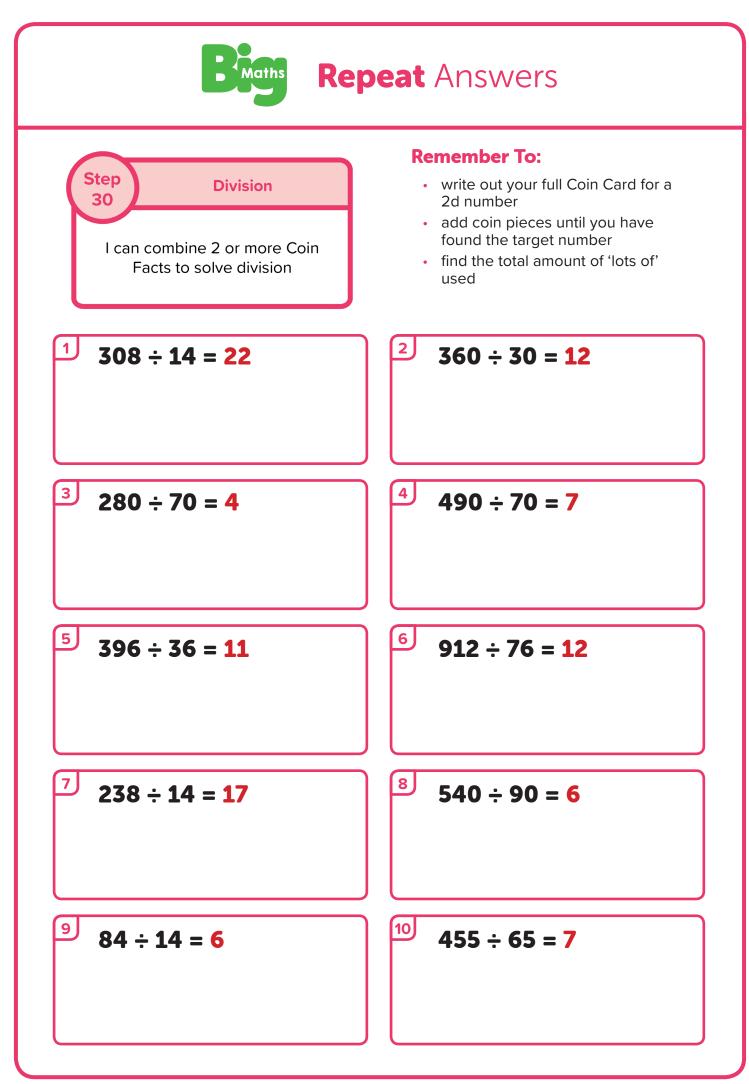


Question Practice Resources

Question 9 - I can combine 2 or more Coin Facts to solve division

- write out your full Coin Card for 2d number
- add coin pieces until you have found the target number
- find the total amount of 'lots of' used



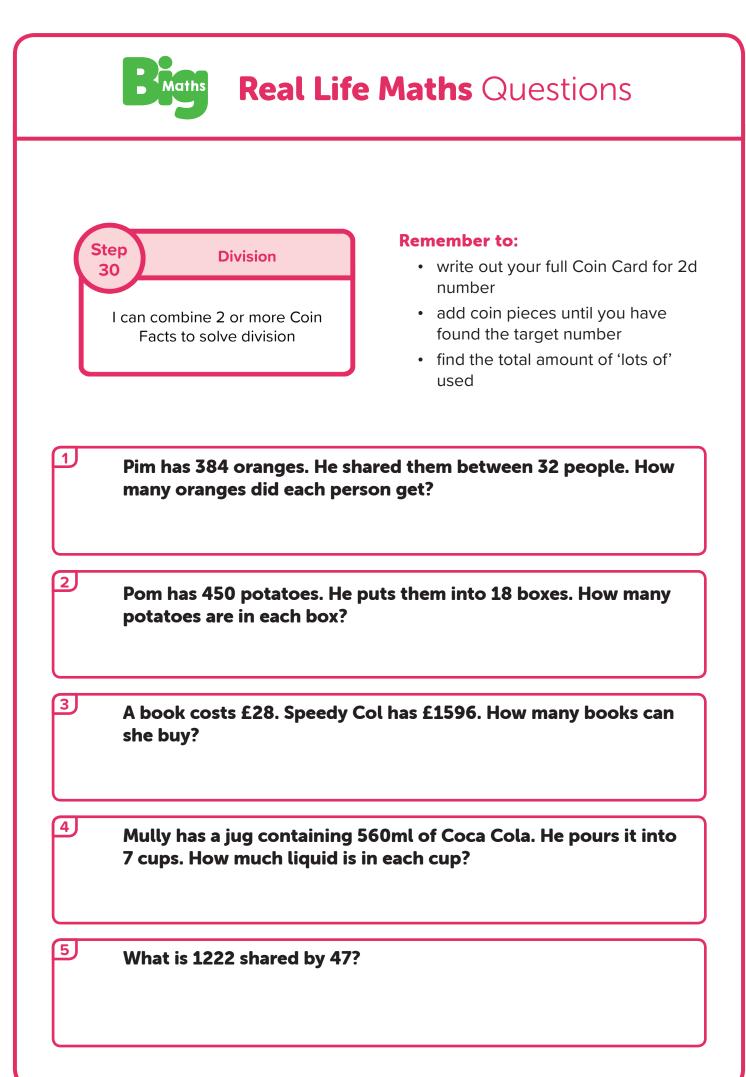






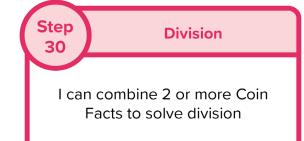








Real Life Maths Answers



1

2

5

Remember to:

- write out your full Coin Card for 2d number
- add coin pieces until you have found the target number
- find the total amount of 'lots of' used

Pim has 384 oranges. He shared them between 32 people. How many oranges did each person get?

Each person gets 12 oranges.

Pom has 450 potatoes. He puts them into 18 boxes. How many potatoes are in each box?

Each box contains 25 potatoes.

A book costs £28. Speedy Col has £1596. How many books can she buy?

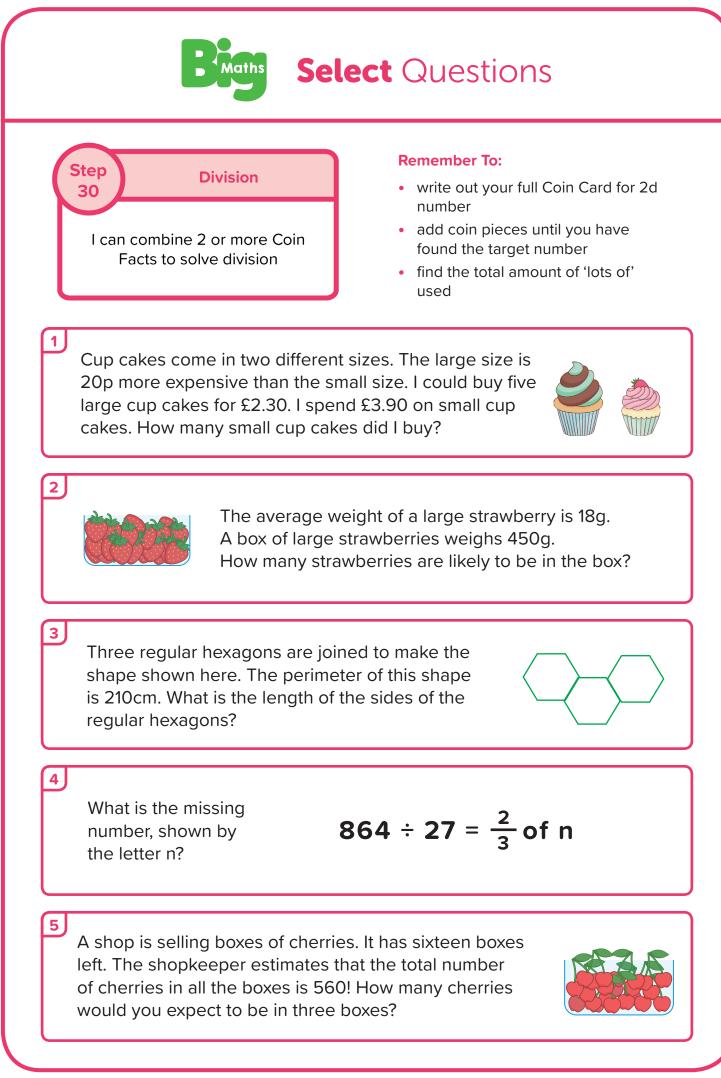
She can buy 57 books.

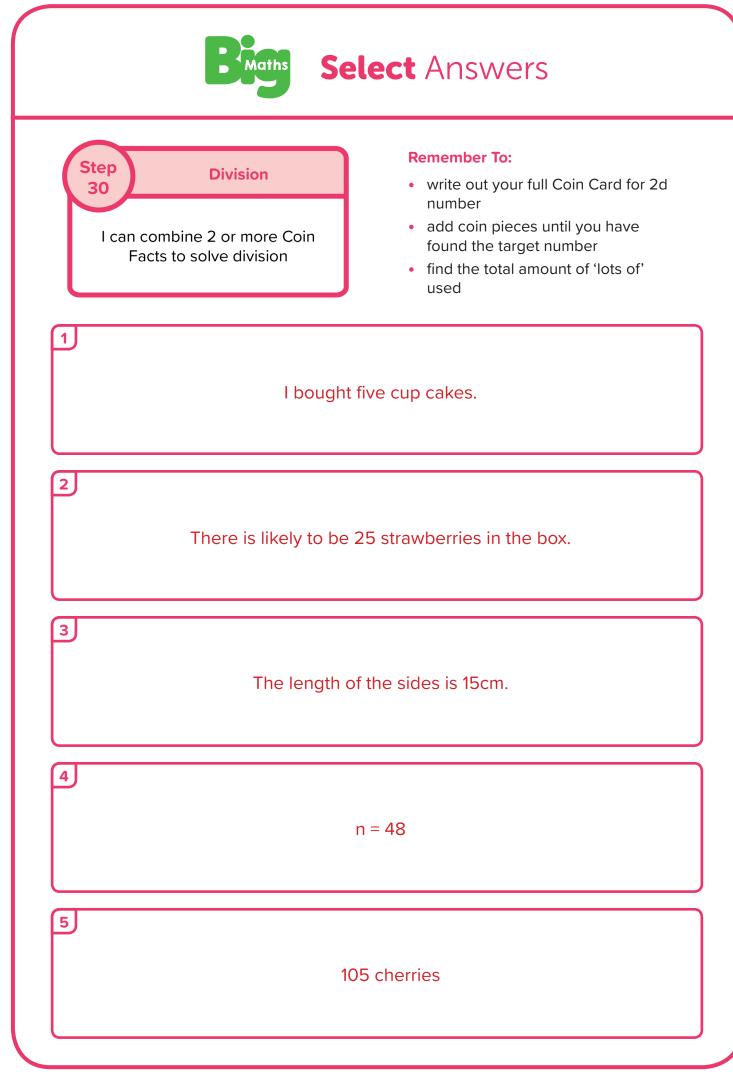
4 Mully has a jug containing 560ml of Coca Cola. He pours it into 7 cups. How much liquid is in each cup?

Each cup contains 80ml of Coca Cola.

What is 1222 shared by 47?

The answer is 26.





Question Practice Resources

Question 10 - I can solve any 5 digit + 5 digit

