

# Division with remainders (Bus stop method)

Today, we are revising our work on division using the bus stop method. Make sure you have used TTRockstars to practise some of your multiplication and division of numbers.

<https://whiterosemaths.com/homelearning/year-5/>


Visit the website and watch the video on:

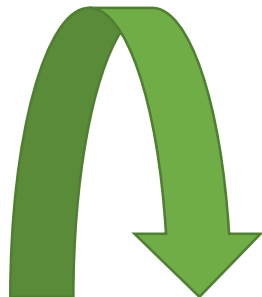
- **Summer Term - Week 3 (w/c 4th May)**
- Lesson 3-division with remainders

This will remind you of the work we have completed in class on division with remainders.



# Division with remainders (Bus stop method)

- Visit this website: <https://www.bbc.co.uk/bitesize/articles/zfdsy9q>
  - Watch the videos (if you need more work on division).
  - Complete activities 1 and 2 on the practise section.
  - Activity 2 has also been put on the next pages:
- 
- A decorative graphic in the bottom right corner featuring a teal background with a circular arrangement of numbers (3, 4, 5, 7, 9, 5, 8, 3, 5, 2) and mathematical symbols (%, €, ^, /, +, =,
- $\frac{1}{2}$
- ,
- $\frac{3}{4}$
- ,
- $\frac{5}{6}$
- ,
- $\frac{7}{8}$
- ,
- $\frac{9}{10}$
- ).



**Don't be put off by large numbers. Look at the individual digits and use division facts that you know.**

**1**

Complete these division calculations using mental methods.

$$12 \div 6 = \square$$

$$32 \div 8 = \square$$

$$45 \div 9 = \square$$

$$48 \div 6 = \square$$

$$21 \div 7 = \square$$

$$88 \div 8 = \square$$

**Try these questions!**

**2**

Complete these short divisions.

**Example:**

$$\begin{array}{r} 8 \\ 7 \overline{) 56} \end{array}$$

$$6 \overline{) 54}$$

$$7 \overline{) 63}$$

$$9 \overline{) 99}$$

$$9 \overline{) 81}$$

$$8 \overline{) 64}$$

$$4 \overline{) 48}$$

**Parent tip**  
The number being divided is written on the right. Divide the tens number first if possible, and then move onto the ones.



3

Write each calculation as a short division calculation and then solve it.

$$279 \div 9$$


$$287 \div 7$$


$$60 \div 3$$


$$240 \div 8$$


4

Use short division to solve these calculations.

Some of them will have remainders.

**Example:**

$$4 \overline{) 38} \begin{array}{l} 9 \text{ r}2 \\ 38 \\ \hline \end{array}$$

$$52 \div 4$$


$$75 \div 2$$


$$72 \div 3$$


$$65 \div 4$$


5

Solve these word problems using short division.

Farmer Dray had 78 chickens.

He has 6 coops, which they go into at night.

He puts the same number of chickens in each coop.

How many chickens go into each coop?  chickens


6

Kieran has 98 stickers.

He shares them equally between 5 friends and keeps the remainder for himself.

How many stickers does each friend get?  stickers

How many stickers does Kieran keep?  stickers




Match the question to the correct answer.

$$6,463 \div 6$$

Thousands	Hundreds	Tens	Ones
1,000 1,000	100 100	10 10	1 1
1,000 1,000	100 100	10 10	1
1,000 1,000		10 10	


- E

1,077 r1

1,106 r3

1,077 r3

VF

True or false? The answer to the calculation below has a remainder.

$$8,832 \div 8$$

Thousands	Hundreds	Tens	Ones
1,000 1,000	100 100	10 10	1 1
1,000 1,000	100 100	10	1 1
1,000 1,000	100 100		
1,000 1,000	100 100		


- E

VF



Try these questions involving division.



Match the question to the correct answer.

A.  $6,376 \div 7$

754 r4

B.  $4,528 \div 6$

1,820 r3

C.  $7,283 \div 4$

910 r6

Complete the calculation so that it has a remainder of 1.

		1	0	7	r1
9	9		6		





Sean and Gabriel are calculating  $7,987 \div 6$ .



Sean

The answer is  
 $1,331 \text{ r}1$ .

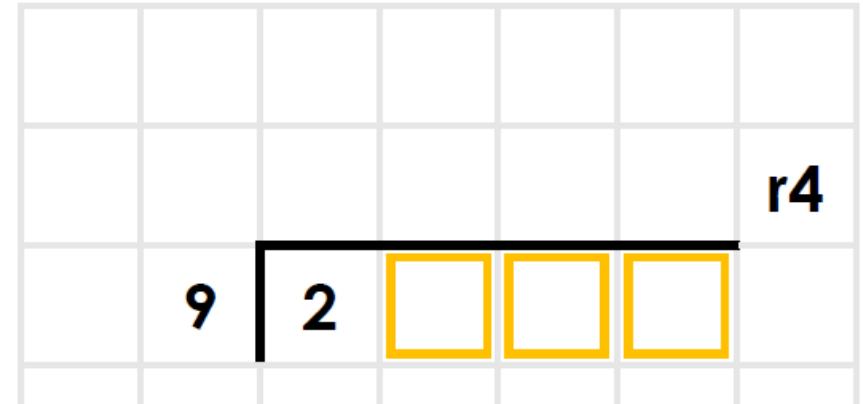


Gabriel

The answer is  
 $1,332 \text{ r}1$ .

Who is correct? Explain your reasoning.

Arrange the number cards below to create a calculation which has a remainder of 4. Complete the calculation.



# Let's remember...

There are 3 ways of writing a remainder:

1. 
$$\begin{array}{r} 1232 \text{ r } 3 \\ 6 \overline{) 71395} \end{array}$$
 As a remainder

2. 
$$\begin{array}{r} 1232 \text{ r } 3 \\ 6 \overline{) 71395} \end{array} \rightarrow \begin{array}{r} 3 \\ 6 \end{array}$$
  
use the remainder as a numerator.  
Use the number divided by as the denominator

$$\begin{array}{r} 1232 \frac{3}{6} \end{array}$$
 As a fraction

3. 
$$\begin{array}{r} 1232.5 \\ 6 \overline{) 71395.0} \end{array}$$
 As a decimal

This video reminds you of how to divide numbers including writing remainders as decimals.



<https://www.youtube.com/watch?v=CAHzPGO6tXg>

**Write these remainders as a fraction:**

- $673 \div 5 =$
- $8293 \div 7 =$
- $2604 \div 9 =$

**Write these remainders as a decimal:**

$$801 \div 6 =$$

$$4885 \div 4 =$$

$$7079 \div 3 =$$

**Try these division word problems:**

725 cocktail sausages are bought for a school disco. 5 are put onto each plate. How many plates are needed?

At the Christmas market, each car had to pay £7 to park

The school collected £399 from the cars.

How many cars were there?

