

# Long Division with Remainders

There are two different methods for long division.

## method 1

642 ÷ 14						
			4	5	r1	2
1	4	6	4	2		
	-	5	6	0		
			8	2		
		-	7	0		
			1	2		

(14 × 40)

(14 × 5)

Use method 1 to complete these long divisions.

1) 1320 ÷ 23						

2) 2892 ÷ 35						

## method 2

642 ÷ 14							
			2	2	0	r1	1
2	1	4	6	3	1		
	-	4	2				
			4	3			
		-	4	2			
				1	1		

Use method 2 to complete these long divisions.

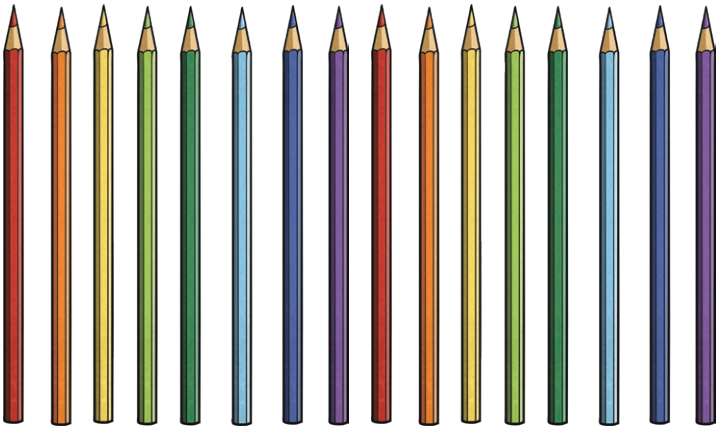
3) 4371 ÷ 41						

4) 6541 ÷ 32						



# Long Division with Remainders

5) 843 pencils need to be sorted into sets of 16.  
How many full sets of pencils will there be?




6) A 3kg bag of flour needs to be divided into portions of 16g per child to make a cupcake for a bake sale.

a) How many 16g portions can be made from the 3kg bag of flour?

b) How much flour will be left over?




7)

When you divide 5230 by 27, the answer is 192 remainder 38.

Zeke

a) How do you know that Zeke has made an error without working out the answer?

---



---



---

b) Work out the correct answer.




# Long Division with Remainders

## Answers

1) $1320 \div 23$						
				5	7	r9
2	3	1	3	2	0	
	-	1	1	5	0	( $23 \times 50$ )
			1	7	0	
		-	1	6	1	( $23 \times 7$ )
					9	

3) $4371 \div 41$							
			1	0	6	r2	5
4	1	4	3	7	1		
	-	4	1				
			2	7	1		
		-	2	4	6		
				2	5		

2) $2892 \div 35$						
			8	2	r2	2
3	5	2	8	9	2	
	-	2	8	0	0	( $35 \times 80$ )
				9	2	
			-	7	0	( $35 \times 2$ )
				2	2	

4) $6541 \div 32$							
			2	0	4	r1	3
3	4	6	5	4	1		
	-	6	4				
			1	4	1		
			-	1	2	8	
					1	3	

5) **52**

6)

a) **187**

b) **8g**

7)

a) **Zeke has given a remainder that is greater than the divisor. This means he can continue dividing by 27 until the remainder is less than 27.**

b) **193r19**