

Long Division (8): Remainder in Context

NAME: _____ CLASS: _____ DATE: _____ SCORE: _____

WORKED EXAMPLE • THE MATRIX METHOD™

Yenni has 179 coins. She puts them into stacks of 5 coins. How many coins will be left over?

		3	5
5	1	7	9
	1	5	
		2	9
		2	5
			4

Number of coins	=	179
Number of coins in 1 stack	=	5
$179 \div 5$	=	35 R 4
Number of coins left over	=	4

Ans: 4 coins

Divide first, then decide which part of the answer is wanted. [15 marks]

- (1)** John has 269 stickers. He puts them equally into 4 books. How many stickers will be left over? **[3]**

Year	1990	1995	2000	2005	2010	2015	2020
Population (millions)	1.2	1.5	1.8	2.1	2.4	2.7	3.0
GDP (billions of dollars)	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Life expectancy (years)	55	60	65	70	75	80	85
Urbanization (%)	30	40	50	60	70	80	90
Healthcare expenditure (USD per capita)	10	20	30	40	50	60	70
Education expenditure (USD per capita)	5	10	15	20	25	30	35
Renewable energy share (%)	10	15	20	25	30	35	40
Gender inequality index	0.70	0.65	0.60	0.55	0.50	0.45	0.40
Corruption index	2.5	3.0	3.5	4.0	4.5	5.0	5.5
Environmental quality index	1.0	1.5	2.0	2.5	3.0	3.5	4.0
Trust index	0.5	0.6	0.7	0.8	0.9	1.0	1.1
Peace index	1.5	2.0	2.5	3.0	3.5	4.0	4.5
Human development index	0.50	0.60	0.70	0.80	0.90	1.00	1.10

Ans: _____ stickers

- (2)** A shop has 358 eggs. The eggs are packed into trays of 3. How many trays can be filled? **[3]**

[illegible]

Ans: _____ trays



Long Division (8): Remainder in Context

- (3) Peter has 427 beads. He puts them into stacks of 5. How many beads will be left over? [3]

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Ans: _____ beads

- (4) There are 194 pupils in a hall. They form teams of 4. How many complete teams can be formed? [3]

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Ans: _____ teams

- (5) Amber has 465 sweets. She puts them equally into 5 bags. How many sweets will be left over? [3]

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Ans: _____ sweets

Answer Key — Long Division (8): Remainder in Context

MATRIX METHOD™ • THE STEPS

Step 1: Divide first. Write down both the answer and the remainder.

Step 2: "How many are left over?" means the answer is the remainder.

Step 3: "How many can be filled?" means the answer is the number of groups.

- (1) Number of stickers = 269
 Number of books = 4
 $269 \div 4$ = 67 R 1
 Number of stickers left over = 1

Ans: 1 sticker

- (2) Number of eggs = 358
 Number of eggs in 1 tray = 3
 $358 \div 3$ = 119 R 1
 Number of trays filled = 119

Ans: 119 trays

- (3) Number of beads = 427
 Number of beads in 1 stack = 5
 $427 \div 5$ = 85 R 2
 Number of beads left over = 2

Ans: 2 beads

- (4) Number of pupils = 194
 Number of pupils in 1 team = 4
 $194 \div 4$ = 48 R 2
 Number of complete teams = 48

Ans: 48 teams

Answer Key — Long Division (8): Remainder in Context

- (5) Number of sweets = 465
 Number of bags = 5
 $465 \div 5$ = 93
 Number of sweets left over = 0

Ans: 0 sweets

COMMON ERROR TO WATCH FOR

Pupils give the wrong half of the answer. Asked how many are left over they write the number of groups, and asked how many groups they write the leftover.