

Remainder Rangers

Turn every remainder into a fraction.

GRADE 4 • MA.4.NSO.2.4

MA.4.NSO.2.4 "Divide a whole number up to four digits by a one-digit whole number with procedural reliability. Represent remainders as fractional parts of the divisor."

NAME _____

DATE _____

REMAINDERS AS PARTS

Divide as usual. If a remainder is left, write the remainder as a fraction with the remainder on top and the divisor on the bottom, then place it after the whole-number quotient.

WORKED EXAMPLE

$$1,529 \div 3$$

1. $15 \div 3 = 5$, remainder 0.
2. Bring down 2: $2 \div 3 = 0$, remainder 2.
3. Bring down 9: $29 \div 3 = 9$, remainder 2.
4. Write the remainder as $2/3$: 509 $2/3$.

Answer: 509 $2/3$

PRACTICE 6 problems

1 $735 \div 4 = \underline{\hspace{2cm}}$

ANSWER _____

2 $1,946 \div 5 = \underline{\hspace{2cm}}$

ANSWER _____

3 $864 \div 7 = \underline{\hspace{2cm}}$

ANSWER _____

4 $3,219 \div 8 = \underline{\hspace{2cm}}$

ANSWER _____

5 $1,005 \div 6 = \underline{\hspace{2cm}}$

ANSWER _____

6 $2,476 \div 9 = \underline{\hspace{2cm}}$

ANSWER _____

APPLY IT Show your work

- 1** At robotics camp, 1,743 centimeters of wire are cut into 6 equal lengths for robot teams. How many centimeters long is each length?

WORK SPACE

ANSWER _____

- 2** A student club records 3,506 seconds of video and splits it into 9 equal clips for a game review. How long is each clip?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Divide 3,009 by 7. Write the answer with a fractional remainder. In one sentence, explain why the denominator is 7.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$735 \div 4 = \underline{\hspace{1cm}}$	183 $\frac{3}{4}$
2	$1,946 \div 5 = \underline{\hspace{1cm}}$	389 $\frac{1}{5}$
3	$864 \div 7 = \underline{\hspace{1cm}}$	123 $\frac{3}{7}$
4	$3,219 \div 8 = \underline{\hspace{1cm}}$	402 $\frac{3}{8}$
5	$1,005 \div 6 = \underline{\hspace{1cm}}$	167 $\frac{3}{6}$
6	$2,476 \div 9 = \underline{\hspace{1cm}}$	275 $\frac{1}{9}$

PART 2 • APPLY IT

1. **290 $\frac{3}{6}$ centimeters** Compute $1,743 \div 6 = 290$ remainder 3. Write the remainder as $\frac{3}{6}$ because the wire is divided into 6 equal lengths.
2. **389 $\frac{5}{9}$ seconds** Compute $3,506 \div 9 = 389$ remainder 5. Write the remainder as $\frac{5}{9}$ of a second.

CHALLENGE

429 $\frac{6}{7}$. The denominator is 7 because the remainder is part of one group of 7.

Accept equivalent simplified fractions, such as $\frac{3}{6} = \frac{1}{2}$, when paired with the correct whole-number quotient. The fractional remainder should use the original divisor as its denominator unless the student writes an equivalent simplified fraction.