

Divide Into Fractions

Turn whole-number division into fractions and mixed numbers.

GRADE 5 • 5.NR.3.1

5.NR.3.1 "Explain the meaning of a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers."

NAME _____

DATE _____

FRACTIONS SHOW DIVISION

Read a/b as "a divided by b." If the numerator is larger than the denominator, divide to find the whole-number part, then write the remainder over the denominator.

WORKED EXAMPLE

Write $7 \div 3$ as a mixed number.

1. Write the division as a fraction: $7/3$.
2. 3 goes into 7 two whole times, with 1 left over.
3. Write the leftover as $1/3$: $7/3 = 2 \frac{1}{3}$.

Answer: $2 \frac{1}{3}$

PRACTICE 6 problems

1 Write $5 \div 2$ as a mixed number.

ANSWER _____

2 Write $8 \div 5$ as a mixed number.

ANSWER _____

3 Write $25 \div 6$ as a mixed number.

ANSWER _____

4 Write the division sentence shown by $14/9$.

ANSWER _____

5 Write $17 \div 8$ as a mixed number.

ANSWER _____

6 Write $24 \div 10$ as a mixed number.

ANSWER _____

APPLY IT Show your work

- 1** A craft club has 26 meters of cord. It divides the cord equally among 4 friendship-bracelet projects. How many meters of cord does each project get?

WORK SPACE

ANSWER _____

- 2** The school garden has 29 cups of potting soil. The soil is shared equally among 5 identical planters. How many cups of soil go in each planter?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Without using a calculator, explain why $49/6$ is greater than 8 but less than 9. Then write $49/6$ as a mixed number.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write $5 \div 2$ as a mixed number.	2 $\frac{1}{2}$
2	Write $8 \div 5$ as a mixed number.	1 $\frac{3}{5}$
3	Write $25 \div 6$ as a mixed number.	4 $\frac{1}{6}$
4	Write the division sentence shown by $14/9$.	$14 \div 9$
5	Write $17 \div 8$ as a mixed number.	2 $\frac{1}{8}$
6	Write $24 \div 10$ as a mixed number.	2 $\frac{2}{5}$

PART 2 • APPLY IT

- 6 $\frac{1}{2}$ meters** Write $26 \div 4$ as $26/4$. Divide to get 6 whole meters with $\frac{2}{4}$ meter left, which is $\frac{1}{2}$ meter.
- 5 $\frac{4}{5}$ cups** Write $29 \div 5$ as $29/5$. Divide to get 5 whole cups with $\frac{4}{5}$ cup left.

CHALLENGE

6 goes into 49 eight times with 1 left over. So $49/6$ is greater than 8 but less than 9, and it equals $8 \frac{1}{6}$.

Accept equivalent fractional forms when they are simplified correctly. For mixed-number answers, the fractional part should be less than 1.