

Fraction Power Moves

Multiply and divide fractions, mixed numbers, and whole numbers.

GRADE 6 • 6.NR.1.2

6.NR.1.2 "Multiply and divide any combination of whole numbers, fractions, and mixed numbers using a student-selected strategy. Interpret products and quotients of fractions and solve word problems."

NAME _____

DATE _____

CHOOSE A STRATEGY

To multiply, convert mixed numbers to improper fractions, then multiply and simplify. To divide by a fraction, multiply by its reciprocal, and use estimation to check whether your answer makes sense.

WORKED EXAMPLE

$$7/11 \times 8/13$$

1. Multiply the numerators: $7 \times 8 = 56$.
2. Multiply the denominators: $11 \times 13 = 143$.
3. The fraction $56/143$ cannot be simplified.

Answer: 56/143

PRACTICE 6 problems

1 $4/5 \times 5/6$

ANSWER _____

2 $9/10 \div 5/6$

ANSWER _____

3 $1 \frac{1}{4} \times 4/9$

ANSWER _____

4 $5/6 \div 1 \frac{1}{4}$

ANSWER _____

5 $6 \times 5/9$

ANSWER _____

6 $2 \frac{1}{5} \div 4$

ANSWER _____

APPLY IT Show your work

- 1** At a school esports event, a $4\frac{1}{2}$ -liter drink container fills cups that hold $\frac{3}{4}$ liter each. How many cups can be filled?

WORK SPACE

ANSWER _____

- 2** A student edits a tutorial video for $1\frac{1}{2}$ hours on each of 4 days. How many hours does the student spend editing?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A robotics club has $3\frac{3}{4}$ meters of cable. Each robot needs $\frac{2}{5}$ meter of cable. How many whole robots can the club supply, and how much cable will remain?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$4/5 \times 5/6$	2/3
2	$9/10 \div 5/6$	1 2/25
3	$1 \frac{1}{4} \times 4/9$	5/9
4	$5/6 \div 1 \frac{1}{4}$	2/3
5	$6 \times 5/9$	3 1/3
6	$2 \frac{1}{5} \div 4$	11/20

PART 2 • APPLY IT

1. **6 cups** Divide the total amount by the amount in each cup: $4 \frac{1}{2} \div 3/4 = 6$.
2. **6 hours** Multiply the daily editing time by the number of days: $1 \frac{1}{2} \times 4 = 6$.

CHALLENGE

9 whole robots, with 3/20 meter of cable remaining

Accept equivalent fractions and improper fractions when they are simplified or correctly equivalent to the answer. Students may use any accurate strategy, including cancellation, converting mixed numbers first, or using visual checks.