

Fraction Power-Up

Multiply whole numbers by fractions.

GRADE 4 • NY-4.NF.4.c

NY-4.NF.4.c "Solve word problems involving multiplication of a whole number by a fraction."

NAME _____

DATE _____

MULTIPLY FRACTION GROUPS

A whole number times a fraction means that many groups of the fraction. Multiply the whole number by the numerator, keep the denominator, then simplify or write a mixed number if needed.

WORKED EXAMPLE

Find $7 \times \frac{5}{6}$.

1. Multiply the whole number and numerator: $7 \times 5 = 35$.
2. Write the product as $\frac{35}{6}$.
3. 6 goes into 35 five times with 5 left over.
4. Write $\frac{35}{6}$ as $5 \frac{5}{6}$.

Answer: $5 \frac{5}{6}$

PRACTICE 6 problems

1 Find $3 \times \frac{1}{2}$.

ANSWER _____

2 Find $4 \times \frac{2}{3}$.

ANSWER _____

3 Find $8 \times \frac{1}{4}$.

ANSWER _____

4 Find $9 \times \frac{2}{8}$. Simplify your answer.

ANSWER _____

5 Find $10 \times \frac{1}{3}$.

ANSWER _____

6 Find $12 \times \frac{3}{8}$. Simplify your answer.

ANSWER _____

APPLY IT Show your work

- 1** Talia spends $\frac{1}{4}$ hour each day drawing panels for her comic club. She draws for 9 days. How many hours does Talia spend drawing?

WORK SPACE

ANSWER _____

- 2** Ten model rockets each need $\frac{3}{8}$ meter of ribbon for streamers. How many meters of ribbon are needed altogether?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find $11 \times \frac{3}{8}$. Then explain why the product is greater than 4 but less than 5.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find $3 \times 1/2$.	1 1/2
2	Find $4 \times 2/3$.	2 2/3
3	Find $8 \times 1/4$.	2
4	Find $9 \times 2/8$. Simplify your answer.	2 1/4
5	Find $10 \times 1/3$.	3 1/3
6	Find $12 \times 3/8$. Simplify your answer.	4 1/2

PART 2 • APPLY IT

- 2 1/4 hours** Multiply $9 \times 1/4 = 9/4$. Write $9/4$ as $2 1/4$.
- 3 3/4 meters** Multiply $10 \times 3/8 = 30/8$. Simplify $30/8$ to $15/4$, or $3 3/4$.

CHALLENGE

$11 \times 3/8 = 33/8 = 4 1/8$. Because $32/8$ equals 4 and $40/8$ equals 5, $33/8$ is greater than 4 and less than 5.

Accept equivalent simplified fractions, improper fractions, or mixed numbers when they show the same value. For word problems, accept the correct unit with the answer.