

Fraction Power Practice

Multiply whole numbers by fractions.

GRADE 4 • NY-4.NF.4

NY-4.NF.4 "Apply and extend previous understandings of multiplication to multiply a whole number by a fraction."

NAME _____

DATE _____

MULTIPLY AND SIMPLIFY

To multiply a whole number by a fraction, multiply the whole number and the numerator. Keep the denominator, then simplify the fraction or write a mixed number if needed.

WORKED EXAMPLE

Find $11 \times \frac{5}{12}$.

1. Write the product as $55/12$.
2. Divide 55 by 12.
3. $55/12 = 4 \frac{7}{12}$.

Answer: 4 $\frac{7}{12}$

PRACTICE 6 problems

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

ANSWER _____

2 Find $4 \times \frac{1}{6}$.

ANSWER _____

3 Find $6 \times \frac{1}{8}$.

ANSWER _____

4 Find $8 \times \frac{3}{10}$.

ANSWER _____

5 Find $10 \times \frac{1}{2}$.

ANSWER _____

6 Find $9 \times \frac{2}{3}$.

ANSWER _____

APPLY IT Show your work

- 1** At a robotics club, 8 teams each finish $\frac{3}{4}$ of a challenge course during practice. How many whole challenge courses do the teams finish altogether?

WORK SPACE

ANSWER _____

- 2** A library reading contest gives $\frac{2}{3}$ point for each book in a special series. Priya reads 9 books in the series. How many points does she earn?

WORK SPACE

ANSWER _____

CHALLENGE One step up

For a class science project, 10 small bottles each hold $\frac{3}{8}$ liter of colored water. How many liters do the bottles hold altogether? Explain why your answer is greater than 3 liters.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Find $2 \times \frac{3}{4}$.	1 $\frac{1}{2}$
2	Find $4 \times \frac{1}{6}$.	$\frac{2}{3}$
3	Find $6 \times \frac{1}{8}$.	$\frac{3}{4}$
4	Find $8 \times \frac{3}{10}$.	2 $\frac{2}{5}$
5	Find $10 \times \frac{1}{2}$.	5
6	Find $9 \times \frac{2}{3}$.	6

PART 2 • APPLY IT

- 6 whole challenge courses** Multiply $8 \times \frac{3}{4} = \frac{24}{4}$. The teams finish 6 whole challenge courses altogether.
- 6 points** Multiply $9 \times \frac{2}{3} = \frac{18}{3}$. Priya earns 6 points.

CHALLENGE

$3 \frac{3}{4}$ liters. Ten groups of $\frac{3}{8}$ liter equal $\frac{30}{8}$ liters, or $3 \frac{3}{4}$ liters. Eight bottles hold 3 liters, and the other 2 bottles add $\frac{3}{4}$ liter.

Accept equivalent fractions and mixed numbers when they have the same value. Students should simplify fractional answers when possible.