

Grade 5 - Multiplying Fractions and Mixed Numbers - Worksheet

Common Core 5.NF.B.4a, 5.NF.B.6 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

These 20 problems practice multiplying fractions, whole numbers, and mixed numbers, as listed in standards 5.NF.B.4a and 5.NF.B.6. Early problems use tape diagrams and area models. Later problems use improper fractions and mixed numbers.

The last six problems are word problems about recipes, water jugs, gardens, pizza, peaches, and trail mix. Simplify each answer and write improper fractions as mixed numbers.

Grade 5 · Common Core State Standards: **5.NF.B.4a, 5.NF.B.6**

Exercise 1 - Whole number times unit fraction

Find $4 \times \frac{1}{5}$.

Exercise 2 - Whole number times a fraction

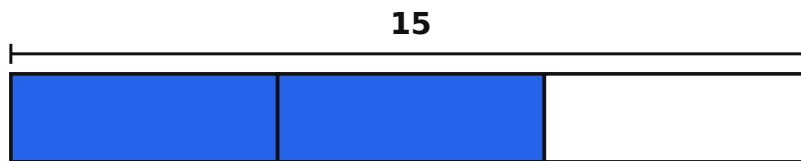
Find $3 \times \frac{2}{7}$.

Exercise 3 - Improper product

Find $5 \times \frac{3}{4}$.

Exercise 4 - Fraction of a whole number

Find $\frac{2}{3}$ of 15. The tape diagram shows 15 cut into 3 equal parts.



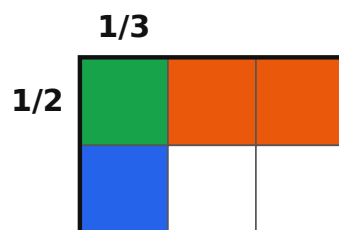
Fifteen cut into 3 equal parts.

Exercise 5 - Three fourths of 20

Calculate $\frac{3}{4} \times 20$.

Exercise 6 - Half of a third

Use the area model to find $\frac{1}{2} \times \frac{1}{3}$.



Blue columns, orange rows, and green overlap.

Exercise 7 - Simplify the product

Find $\frac{2}{3} \times \frac{3}{5}$.

Exercise 8 - Product that simplifies to a unit fraction

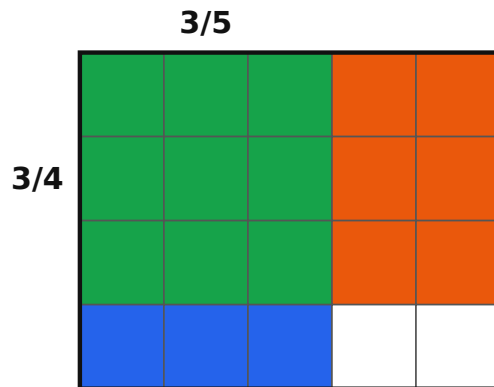
Find $\frac{3}{4} \times \frac{4}{9}$.

Exercise 9 - Larger numerators

Find $\frac{5}{6} \times \frac{3}{10}$.

Exercise 10 - Product from a model

The model shows the product of two fractions. Write the multiplication sentence and find the product.



Blue columns, orange rows, and green overlap.

Exercise 11 - Mixed number times whole

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

Exercise 12 - Mixed number times fraction

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

Exercise 13 - Two mixed numbers

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

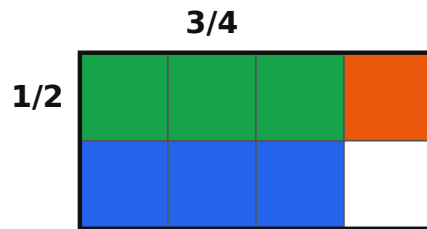
Exercise 14 - Larger mixed numbers

Find $3\frac{1}{2} \times 2\frac{2}{5}$.

Exercise 15 - Half a recipe

Maya's cookie recipe needs $\frac{3}{4}$ cup of sugar. She makes $\frac{1}{2}$ of the recipe. How much sugar does

she use? The area model uses $\frac{1}{2}$ for the height and $\frac{3}{4}$ for the width.



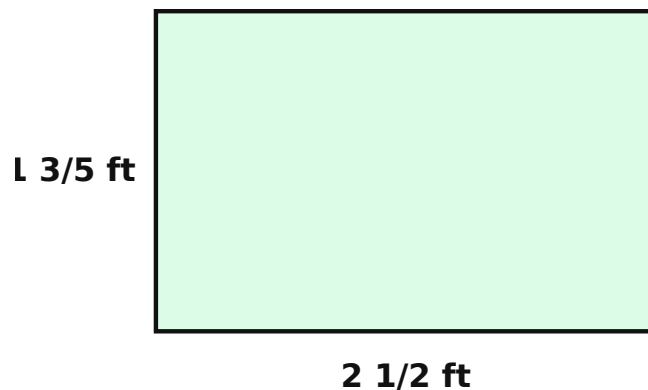
Blue columns, orange rows, and green overlap.

Exercise 16 - Water jugs

The Little League team has 6 water jugs. Each jug holds $\frac{3}{4}$ gallon. How many gallons of water is that in all?

Exercise 17 - Garden bed area

Sofia's garden bed is $2\frac{1}{2}$ feet long and $1\frac{3}{5}$ feet wide. Find the area of the garden bed.



Sofia's garden bed.

Exercise 18 - Pizza left over

Ethan has $\frac{5}{6}$ of a pizza left. He eats $\frac{2}{5}$ of what is left. What fraction of the whole pizza does he eat? What fraction of the whole pizza is still left?

Exercise 19 - Peaches at the market

At the farmers market, Priya buys $3\frac{1}{2}$ pounds of peaches. Peaches cost \$2.50 per pound. How much does Priya pay?

Exercise 20 - Raisins for the team

Diego's trail mix recipe uses $1\frac{2}{3}$ cups of raisins for one batch. He makes $2\frac{1}{2}$ batches. Raisins cost \$1.50 per cup. How many cups of raisins does he need, and what do the raisins cost?