

Grade 4 - Multiplying a Fraction by a Whole Number - Test

Common Core 4.NF.B.4a, 4.NF.B.4b, 4.NF.B.4c · maths-pdf.fr/en/

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

This test checks multiplying a fraction by a whole number with unit fractions, number lines and word problems. It has 9 questions worth 20 points. Allow 45 minutes and no calculator.

About this test

- Grade: Grade 4
- Chapter: Multiplying a Fraction by a Whole Number
- Standards: 4.NF.B.4a, 4.NF.B.4b, 4.NF.B.4c
- Time: 45 minutes
- Total: 20 points

Question 1 - Unit fractions [2 pts]

The strip shows $\frac{5}{6}$.



A strip cut into sixths.

- Write $\frac{5}{6}$ as a multiple of a unit fraction. (1 point)
- Write $\frac{5}{6}$ as a sum of unit fractions. (1 point)

Question 2 - Unit fraction products [2 pts]

Find each product.

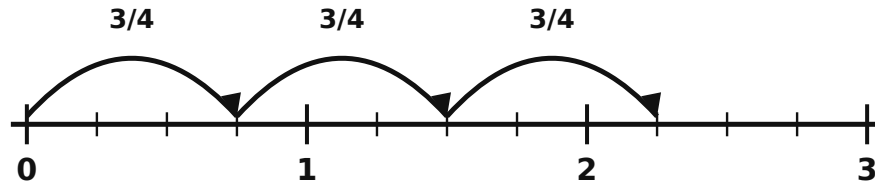
- $3 \times \frac{1}{8}$ (1 point)
- $7 \times \frac{1}{5}$ as a fraction and a mixed number (1 point)

Question 3 - Multiply by a fraction [2 pts]

Find $4 \times \frac{3}{5}$. Write the answer as a fraction and as a mixed number.

Question 4 - Jumps on a number line [2 pts]

The number line shows equal jumps from 0.



Three jumps of $\frac{3}{4}$.

Write a multiplication equation for the jumps. Find the product.

Question 5 - Larger product [2 pts]

Find $8 \times \frac{5}{12}$. Write the answer as a mixed number.

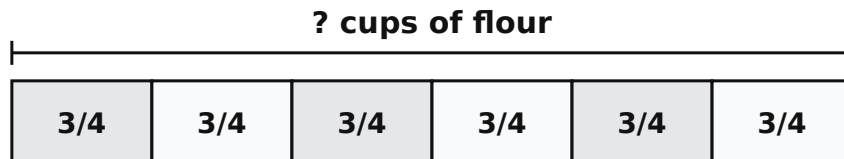
Question 6 - Morning runs [3 pts]

Maya runs $\frac{5}{6}$ mile every morning for 4 mornings.

- Write a multiplication equation for the total distance. (1 point)
- Write the total as a mixed number. (1 point)
- Did she run more than 3 miles? Explain. (1 point)

Question 7 - Batches of muffins [3 pts]

Each batch of muffins uses $\frac{3}{4}$ cup of flour. A baker makes 6 batches.



A tape diagram of 6 batches.

- a. Write a multiplication equation for the flour needed. (1 point)
- b. How many cups of flour are needed? Write a mixed number. (1 point)
- c. She has a 5-cup bag of flour. How much flour is left? (1 point)

Question 8 - Products for nine fourths [2 pts]

Write $\frac{9}{4}$ as a product of a whole number and a fraction in two different ways.

Question 9 - Diego's mistake [2 pts]

Diego says $3 \times \frac{2}{5} = \frac{6}{15}$. Explain his mistake. Then find the correct product.