

Grade 5 · Multiplying Fractions · Test

Common Core 5.NF.B.3, 5.NF.B.4, 5.NF.B.5, 5.NF.B.6 · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

This test checks Common Core 5.NF.B.3 through 5.NF.B.6. Show your work for every question. Simplify answers and write improper fractions as mixed numbers when asked. You have 45 minutes. No calculator is allowed. The test is worth 20 points.

Test information

- **Grade:** Grade 5
- **Chapter:** Multiplying Fractions
- **Common Core:** 5.NF.B.3, 5.NF.B.4, 5.NF.B.5, 5.NF.B.6
- **Time:** 45 minutes
- **Total:** 20 points (Question 1: 2 pts; Question 2: 2 pts; Question 3: 2 pts; Question 4: 2 pts; Question 5: 2 pts; Question 6: 2 pts; Question 7: 2 pts; Question 8: 3 pts; Question 9: 3 pts)

Question 1: Division and fractions (2 points)

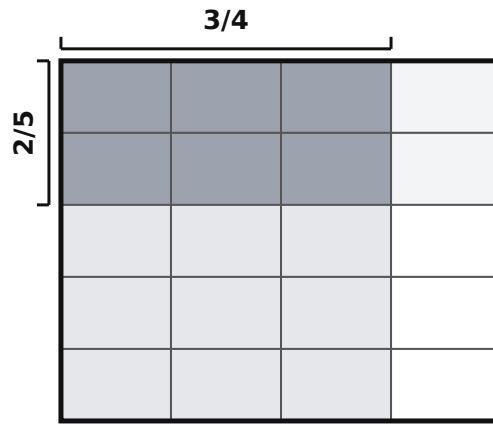
- Write $9 \div 4$ as a mixed number. (1 point)
- Three pounds of rice are shared equally by 5 families. Write the amount each family gets as a fraction. (1 point)

Question 2: Whole numbers and fractions (2 points)

- Find $5 \times \frac{3}{10}$. (1 point)
- Find $\frac{7}{12} \times 8$. Write the answer as a mixed number. (1 point)

Question 3: Reading an area model (2 points)

The model shows the product of two fractions.



Shaded rows and columns.

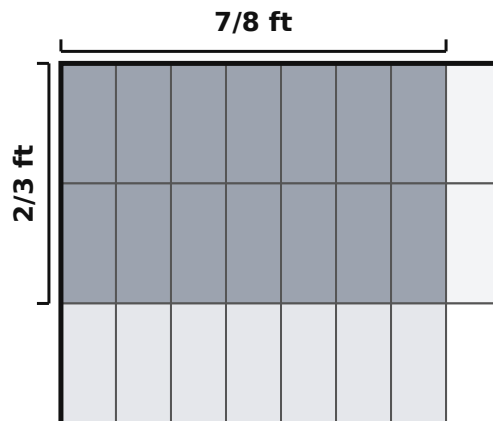
- Write the multiplication sentence the model shows. (1 point)
- Find the product in simplest form. (1 point)

Question 4: Multiplying fractions (2 points)

- Find $\frac{4}{9} \times \frac{3}{10}$. (1 point)
- Find $\frac{5}{8} \times \frac{2}{10}$. (1 point)

Question 5: Area of a rectangle (2 points)

Rectangle A is shown inside a square that is 1 ft by 1 ft.



Rectangle inside a 1-foot square.

- Find the area of Rectangle A. (1 point)
- Rectangle B is also $\frac{2}{3}$ ft tall but $1\frac{1}{4}$ ft wide. Is the area of B greater than or less than the area of A? Explain. (1 point)

Question 6: Size of a product (2 points)

Write $<$, $>$, or $=$ in each blank without finding the product.

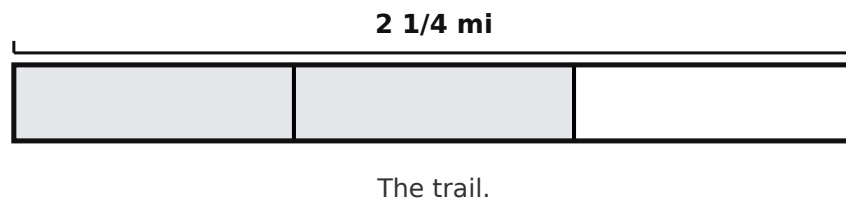
- a. $\frac{3}{4} \times \frac{2}{3} = \frac{2}{3}$ (1 point)
- b. $1\frac{1}{8} \times 6 = 6$ (1 point)

Question 7: Mixed number products (2 points)

- a. Find $2\frac{1}{2} \times 1\frac{3}{5}$. (1 point)
- b. Find $3\frac{1}{3} \times 2\frac{1}{4}$. Write the answer as a mixed number. (1 point)

Question 8: Hiking trail (3 points)

A trail is $2\frac{1}{4}$ miles long. Liam hikes $\frac{2}{3}$ of the trail.



- a. How many miles does Liam hike? (2 points)
- b. How many miles of the trail are left? (1 point)

Question 9: Ribbon for a project (3 points)

Mei has $4\frac{1}{2}$ yards of ribbon. She uses $\frac{2}{3}$ of it for bows. She uses $\frac{5}{6}$ of the rest for gift wrap.

- a. How many yards does she use for bows? (1 point)
- b. How many yards does she use for gift wrap? (1 point)
- c. How many yards are left? (1 point)