

Grade 5 - Multiplying Fractions and Mixed Numbers - Test

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

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

This test has 9 questions worth 20 points in all. It covers multiplying fractions, whole numbers, and mixed numbers (5.NF.B.4a, 5.NF.B.6). Show all work, simplify answers, and write units in word problems. The test takes about 45 minutes.

About this test

- Grade: Grade 5
- Chapter: Multiplying Fractions and Mixed Numbers
- Standards: 5.NF.B.4a, 5.NF.B.6
- Time: 45 minutes
- Total: 20 points

Question 1 - Whole number and fraction [2 pts]

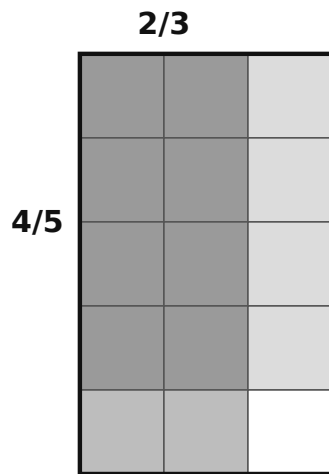
- a. Find $6 \times \frac{2}{5}$. (1 point)
- b. Find $\frac{3}{5}$ of 15. (1 point)

Question 2 - Product of two fractions [2 pts]

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

Question 3 - Read the model [2 pts]

The area model shows the product of two fractions.



Blue columns, orange rows, and green overlap.

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

Question 4 - Mixed number products [3 pts]

- Find $1\frac{1}{2} \times 3\frac{1}{3}$. (1 point)
- Find $2\frac{2}{3} \times 1\frac{3}{4}$. (2 points)

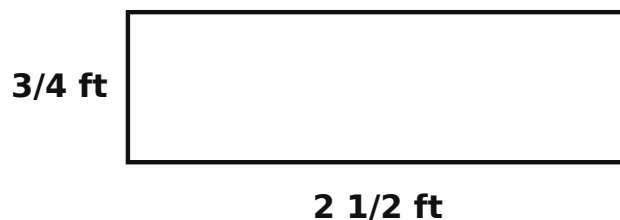
Question 5 - Is it reasonable? [2 pts]

Aisha says that $4\frac{1}{2} \times \frac{3}{4}$ equals $6\frac{3}{4}$.

- Explain why her answer cannot be correct without finding the exact product. (1 point)
- Find the correct product. (1 point)

Question 6 - Garden rectangles [2 pts]

A rectangular garden bed is $2\frac{1}{2}$ feet long and $\frac{3}{4}$ foot wide.



Sofia's garden bed.

- Find the area of the garden bed. (1 point)
- A second bed is $3\frac{1}{3}$ feet long and $2\frac{1}{4}$ feet wide. Find its area. (1 point)

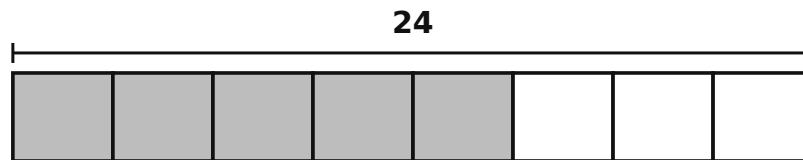
Question 7 - Recipe amounts [2 pts]

A pancake recipe needs $2\frac{1}{4}$ cups of flour.

- Noah makes $\frac{1}{3}$ of the recipe. How much flour does he use? (1 point)
- Mei makes $2\frac{1}{2}$ times the recipe. How much flour does she use? (1 point)

Question 8 - Bus riders [2 pts]

Of the 24 students in Mei's class, $\frac{5}{8}$ ride the bus. Of the bus riders, $\frac{2}{5}$ sit in the front rows.

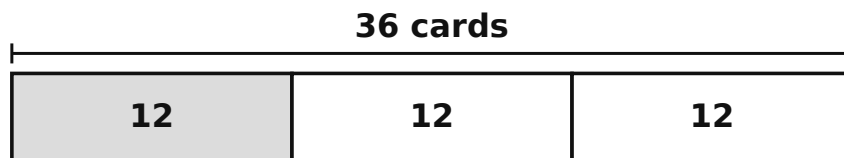


Twenty-four students in 8 equal groups.

- How many students ride the bus? (1 point)
- How many bus riders sit in the front rows? (1 point)

Question 9 - Baseball cards [3 pts]

Liam has 36 baseball cards. He gives $\frac{1}{3}$ of the cards to his brother. Then he gives $\frac{1}{4}$ of the cards that are left to a friend.



Liam's 36 cards.

- How many cards does Liam give to his brother? (1 point)
- How many cards does he give to his friend? (1 point)
- How many cards does Liam have left? (1 point)