

# Grade 5 · Dividing Unit Fractions and Whole Numbers · Test

Common Core 5.NF.B.7 · mathovore.fr

Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Score: \_\_\_\_\_

This test checks Common Core 5.NF.B.7: dividing unit fractions by whole numbers and whole numbers by unit fractions. Show your work for every question. You have 45 minutes. No calculator is allowed. The test is worth 20 points.

## Test information

- **Grade:** Grade 5
- **Chapter:** Dividing Unit Fractions and Whole Numbers
- **Common Core:** 5.NF.B.7
- **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: 3 pts; Question 8: 3 pts; Question 9: 2 pts)

## Question 1: Unit fractions divided by whole numbers (2 points)

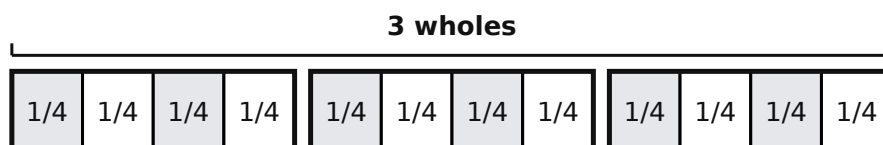
- a. Find  $\frac{1}{3} \div 5$ . (1 point)  
b. Find  $\frac{1}{8} \div 2$ . (1 point)

## Question 2: Whole numbers divided by unit fractions (2 points)

- a. Find  $4 \div \frac{1}{6}$ . (1 point)  
b. Find  $10 \div \frac{1}{3}$ . (1 point)

## Question 3: Reading a model (2 points)

The model shows 3 wholes, each cut into equal parts.



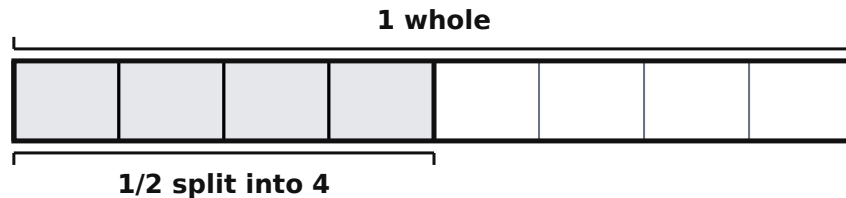
Three wholes cut into equal parts.

- Write the division equation the model shows. (1 point)
- Find the quotient. (1 point)

#### Question 4: Splitting a half (2 points)

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The bar shows one whole. The shaded half is cut into 4 equal pieces.



One half cut into 4 pieces.

- Write the division expression for the shaded half. (1 point)
- What fraction of the whole is one small piece? (1 point)

#### Question 5: Checking a classmate (2 points)

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Mei says  $\frac{1}{4} \div 3 = \frac{3}{4}$ . Is she correct? Show how you know, and give the correct quotient.

#### Question 6: Missing numbers (2 points)

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- $\frac{1}{6} \div [\ ] = \frac{1}{24}$  (1 point)
- $[\ ] \div [\ ] = 35$  (1 point)

#### Question 7: Bags of apples (3 points)

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Noah has 5 pounds of apples. He puts  $\frac{1}{3}$  pound of apples in each bag.



Apples in pounds.

- How many bags can Noah fill? (2 points)
- He sells 6 of the bags. How many pounds of apples are in the bags that are left? (1 point)

#### Question 8: Cheese sandwiches (3 points)

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A deli has  $\frac{1}{2}$  pound of cheese. The cheese is shared equally among 6 sandwiches.

- a. How many pounds of cheese go on each sandwich? (2 points)
- b. How many pounds of cheese are on 4 sandwiches? (1 point)

### Question 9: Comparing quotients (2 points)

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- a. Which is greater,  $\frac{1}{5} \div 2$  or  $\frac{1}{5} \div 4$ ? Explain. (1 point)
- b. Which is greater,  $2 \div \frac{1}{5}$  or  $2 \div \frac{1}{4}$ ? Explain. (1 point)