

# Grade 5 - Fractions as Division - Test Answer Key

Common Core 5.NF.B.3 · maths-pdf.fr/en/

This answer key gives worked solutions and a scoring guide for each of the 9 test questions, worth 20 points in all. Use the scoring notes to give partial credit when the setup is correct but the final form is not simplified.

**Grade 5** · Common Core State Standards: **5.NF.B.3**

## Question 1 - Division and fractions [2 pts]

(a)  $5 \div 8 = \frac{5}{8} : \frac{5}{8}$ .

(b)  $3 \div 7$ .

*Scoring: 1 point for each correct answer. In (b), the numerator must come first.*

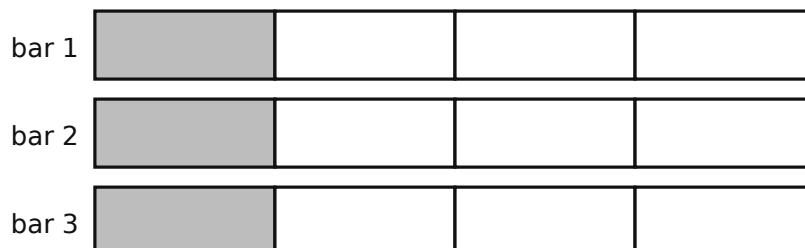
## Question 2 - Quotients as mixed numbers [2 pts]

(a)  $11 \div 4 = \frac{11}{4} = 2\frac{3}{4} : 2\frac{3}{4}$ .

(b)  $19 \div 6 = \frac{19}{6} = 3\frac{1}{6} : 3\frac{1}{6}$ .

*Scoring: 1 point for each correct mixed number.*

## Question 3 - Sharing granola bars [2 pts]



One friend gets the shaded pieces: 3 fourths.

(a)  $3 \div 4$ .

(b)  $3 \div 4 = \frac{3}{4}$ : **each friend gets  $\frac{3}{4}$  of a bar.**

Scoring: 1 point for the sentence; 1 point for the fraction.

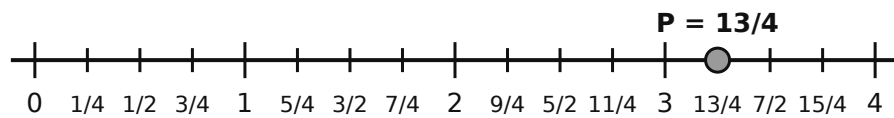
#### Question 4 - Which quotient is greater [2 pts]

$$9 \div 4 = \frac{9}{4} = 2\frac{1}{4}. \quad 14 \div 6 = \frac{14}{6} = 2\frac{2}{6} = 2\frac{1}{3}.$$

Since  $\frac{1}{3} > \frac{1}{4}$ ,  $14 \div 6$  **is greater**.

Scoring: 1 point for writing both quotients as mixed numbers; 1 point for the correct comparison.

#### Question 5 - Point on a number line [3 pts]



P is at  $\frac{13}{4}$ .

(a) P is 13 fourths from 0:  $\frac{13}{4}$ .

(b)  $13 \div 4 = 3 \text{ R } 1$ :  $3\frac{1}{4}$ .

(c)  $13 \div 4$ .

Scoring: 1 point for each part.

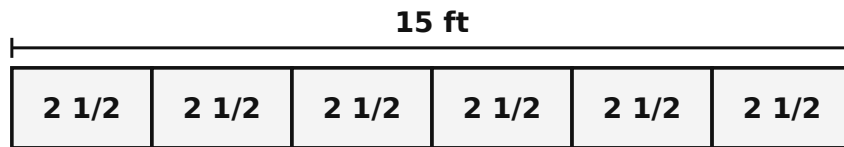
#### Question 6 - Oranges for players [3 pts]

(a)  $10 \div 4$ .

(b)  $\frac{10}{4} = 2\frac{2}{4} = 2\frac{1}{2}$ : **each player gets  $2\frac{1}{2}$  oranges.**

Scoring: (a) 1 point. (b) 1 point for  $2\frac{2}{4}$  (or  $\frac{10}{4}$ ), 1 point for simplest form.

#### Question 7 - Cutting a ribbon [3 pts]



Each piece is 2 1/2 feet.

(a)  $15 \div 6 = \frac{15}{6} = 2\frac{3}{6} = 2\frac{1}{2}$ : **2 1/2 feet.**

(b) Yes.  $2\frac{1}{2}$  is greater than 2, or because  $6 \times 2 = 12$  feet is less than 15 feet.

*Scoring: (a) 1 point for 15/6 or 2 3/6, 1 point for simplest form. (b) 1 point for a correct explanation.*

### Question 8 - Bags of flour [2 pts]

(a)  $9 \div 4 = \frac{9}{4} = 2\frac{1}{4}$ : **2 1/4 pounds.**

(b)  $2\frac{1}{2} = 2\frac{2}{4}$  is greater than  $2\frac{1}{4}$ , so **the single bag is heavier.**

*Scoring: (a) 1 point for 2 1/4 (write the final answer as a mixed number). (b) 1 point for the correct comparison with a reason.*

### Question 9 - Find the mistake [1 pt]

Priya switched the numbers. The number being divided (4) is the numerator and the number divided by (9) is the denominator.  $4 \div 9 = \frac{4}{9}$ .

*Scoring: 1 point for the correct fraction with a valid explanation.*

**Total**

**20 points**