

Grade 4 · Adding and Subtracting Fractions and Mixed Numbers · Quiz

Common Core 4.NF.B.3 · mathovore.fr

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

Try these 10 multiple-choice questions on adding and subtracting fractions and mixed numbers. Choose one answer for each question, then read the explanation to learn from any mistake.

Grade 4 Common Core: 4.NF.B.3

Questions

Question 1

What is $\frac{3}{8} + \frac{2}{8}$?

$\frac{3}{8} + \frac{2}{8}$

☐ $\frac{1}{8}$

☐ $\frac{1}{8}$

☐ $\frac{1}{8}$

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☐ $\frac{1}{8}$

☐ $\frac{1}{8}$

3 eighths and 2 eighths.

- A. $\frac{5}{16}$
- B. $\frac{1}{16}$
- C. $\frac{1}{16}$
- D. $\frac{1}{16}$

Question 2

What is $\frac{7}{10} - \frac{4}{10}$?

- A. $\frac{11}{10}$
- B. $\frac{3}{10}$
- C. $\frac{28}{10}$
- D. $\frac{3}{10}$

Question 3

Which sum equals $\frac{5}{6}$?

- A. $\frac{1}{6} + \frac{1}{6} + \frac{3}{6}$
- B. $\frac{1}{6} + \frac{1}{6} + \frac{1}{6}$
- C. $\frac{2}{6} + \frac{2}{6} + \frac{1}{6}$

D. $\frac{1}{6} + \frac{2}{6} + \frac{3}{6}$

Question 4

Which fraction equals $2\frac{3}{4}$?



Two wholes and three fourths.

- A. $\frac{11}{4}$
- B. $\frac{23}{4}$
- C. $\frac{9}{4}$
- D. $\frac{16}{4}$

Question 5

What is $1\frac{2}{5} + 2\frac{4}{5}$?

- A. $3\frac{6}{10}$
- B. $4\frac{1}{5}$
- C. $3\frac{1}{5}$
- D. $4\frac{1}{10}$

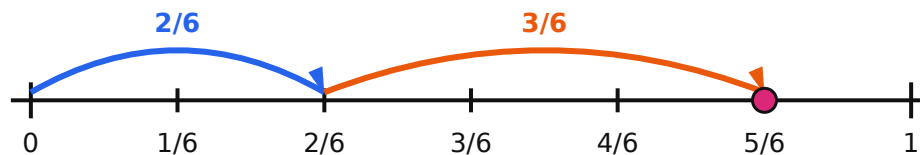
Question 6

What is $5 - 2\frac{1}{3}$?

- A. $3\frac{1}{3}$
- B. $2\frac{2}{3}$
- C. $3\frac{2}{3}$
- D. $2\frac{1}{3}$

Question 7

Which equation matches the number line?



Two jumps from 0.

- A. $\frac{2}{6} + \frac{3}{6} = \frac{5}{12}$
- B. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$
- C. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$
- D. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$

Question 8

Maya walked $1\frac{3}{8}$ miles on Monday and $2\frac{7}{8}$ miles on Tuesday. How far did she walk in all?

- A. $3\frac{10}{16}$
- B. $4\frac{3}{8}$
- C. $3\frac{10}{8}$
- D. $5\frac{3}{8}$

Question 9

What is $4\frac{1}{6} - 1\frac{5}{6}$?

- A. $3\frac{4}{6}$
- B. $2\frac{4}{6}$
- C. $2\frac{2}{3}$
- D. $3\frac{2}{6}$

Question 10

Priya ate $\frac{3}{12}$ of a pizza and Sofia ate $\frac{5}{12}$ of it. How much of the pizza is left?



Eaten (shaded) and left (white).

- A. $\frac{4}{12}$
- B. $\frac{8}{12}$
- C. $\frac{2}{12}$
- D. $\frac{8}{24}$

Answer key

1. **D** - Add the numerators and keep the denominator. Adding the denominators ($\frac{5}{16}$) is a common mistake.
2. **D** - Subtract the numerators and keep the denominator.
3. **A** - $1 + 1 + 3 = 5$ sixths. The other sums make 4 sixths or 6 sixths.
4. **A** - $2 \times 4 + 3 = 11$, so the answer is $\frac{11}{4}$. Writing 2 next to 3 ($\frac{23}{4}$) is a common mistake.
5. **B** - Wholes: 3. Fractions: $\frac{6}{5} = 1\frac{1}{5}$. Total $4\frac{1}{5}$. Keep the denominator 5.
6. **B** - $5 = \frac{15}{3}$ and $2\frac{1}{3} = \frac{7}{3}$, so $\frac{15}{3} - \frac{7}{3} = \frac{8}{3} = 2\frac{2}{3}$.
7. **C** - Two sixths plus three sixths is five sixths.
8. **B** - Wholes: 3. Fractions: $\frac{10}{8} = 1\frac{2}{8}$. Total: $4\frac{2}{8}$. Forgetting to rename gives $3\frac{2}{8}$.
9. **C** - $4\frac{1}{6} = \frac{25}{6}$ and $1\frac{5}{6} = \frac{11}{6}$; $25 - 11 = 14$, and $\frac{14}{6} = 2\frac{2}{3}$. Subtracting the smaller fraction from the larger ($3\frac{4}{6}$) is a common mistake.
10. **A** - They ate $\frac{8}{12}$, and $\frac{12}{12} - \frac{8}{12} = \frac{4}{12}$ is left. $\frac{8}{12}$ is the amount eaten, not left.

Remember:

- A fraction is a sum of unit fractions, and it can be decomposed in more than one way.
- With the same denominator, add or subtract the numerators and keep the denominator.
- A mixed number equals a fraction greater than 1: multiply the whole by the denominator and add the numerator.
- When the fractions in a sum make more than one whole, rename the extra wholes.