

Adding and Subtracting Mixed Numbers

Grade 5 Math • Section 4.4

Name: _____

Date: _____

Score: _____ / 14

Quick Review and Helpful Hints

Method 1 (keep mixed numbers): Add/subtract the whole numbers, then add/subtract the fractions (using LCD). Regroup if needed.

Method 2 (convert to improper fractions): Convert mixed numbers to improper fractions, find the LCD, add/subtract, then convert back.

💡 When subtracting, if the fraction part of the first number is too small, borrow 1 from the whole number.

Example: Find $3\frac{2}{5} + 2\frac{3}{4}$.

Whole numbers: $3 + 2 = 5$. Fractions: LCD of 5 and 4 is 20. $\frac{2}{5} = \frac{8}{20}$, $\frac{3}{4} = \frac{15}{20}$. $\frac{8}{20} + \frac{15}{20} = \frac{23}{20} = 1\frac{3}{20}$. Total: $5 + 1\frac{3}{20} = 6\frac{3}{20}$.

💡 **Answer:** $6\frac{3}{20}$

Practice Problems

Add or subtract. Write your answer in simplest form.

1. $2\frac{1}{3} + 1\frac{1}{4} =$ _____

5. $8\frac{5}{6} - 3\frac{1}{4} =$ _____

9. $1\frac{5}{6} + 2\frac{3}{4} =$ _____

2. $4\frac{2}{5} + 3\frac{1}{2} =$ _____

6. $7\frac{1}{3} - 4\frac{3}{5} =$ _____

10. $10\frac{1}{6} - 6\frac{2}{3} =$ _____

3. $5\frac{3}{8} + 2\frac{1}{6} =$ _____

7. $3\frac{7}{10} + 4\frac{1}{5} =$ _____

11. $5\frac{2}{9} + 3\frac{1}{3} =$ _____

4. $6\frac{1}{4} - 2\frac{2}{3} =$ _____

8. $9\frac{1}{2} - 5\frac{5}{8} =$ _____

12. $4\frac{1}{8} - 1\frac{3}{4} =$ _____

Word Problems

13. A recipe calls for $2\frac{1}{3}$ cups of flour and $1\frac{3}{4}$ cups of sugar. How many cups of dry ingredients are needed in total? _____

14. Jake has $5\frac{1}{2}$ yards of rope. He uses $2\frac{5}{8}$ yards for a project. How much rope is left? _____



Answer Keys

1. $3\frac{7}{12}$

2. $7\frac{9}{10}$

3. $7\frac{13}{24}$

4. $3\frac{7}{12}$

5. $5\frac{7}{12}$

6. $2\frac{11}{15}$

7. $7\frac{9}{10}$

8. $3\frac{7}{8}$

9. $4\frac{7}{12}$

10. $3\frac{1}{2}$

11. $8\frac{5}{9}$

12. $2\frac{3}{8}$

13. $4\frac{1}{12}$

14. $2\frac{7}{8}$

Step-by-Step Explanations

1. Start with the main idea. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $3\frac{7}{12}$. Fractions are easier to combine when the pieces are the same size.

2. Keep the work tidy. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $7\frac{9}{10}$. Always simplify at the end so the answer is clean and useful.

3. Look at what the numbers mean. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $7\frac{13}{24}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

4. Use the setup first. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $3\frac{7}{12}$. Fractions are easier to combine when the pieces are the same size.

5. Check the size of the answer. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $5\frac{7}{12}$. Always simplify at the end so the answer is clean and useful.

6. Match the operation to the words. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $2\frac{11}{15}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

7. Write the important values first. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $7\frac{9}{10}$. Fractions are easier to combine when the pieces are the same size.

8. Follow the pattern carefully. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $3\frac{7}{8}$. Always simplify at the end so the answer is clean and useful.

9. Start with the main idea. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $4\frac{7}{12}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

10. Keep the work tidy. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $3\frac{1}{2}$. Fractions are easier to combine when the pieces are the same size.

11. Look at what the numbers mean. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $8\frac{5}{9}$. Always simplify at the end so the answer is clean and useful.

12. Use the setup first. For adding and subtracting mixed numbers, use a common denominator, combine the numerators, and simplify. The result is $2\frac{3}{8}$. For mixed numbers, converting to improper fractions can make the arithmetic calmer.

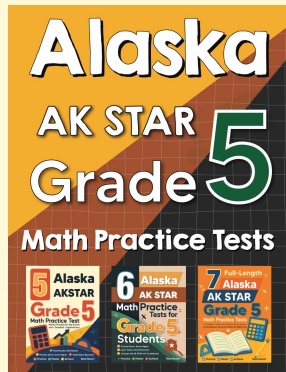
13. Check the size of the answer. For adding and subtracting mixed numbers, add whole numbers and fractions: $2\frac{1}{3} + 1\frac{3}{4} = 3 + \frac{4}{12} + \frac{9}{12} = 4\frac{1}{12}$. Fractions are easier to combine when the pieces are the same size.

14. Match the operation to the words. For adding and subtracting mixed numbers, convert to eighths: $5\frac{1}{2} = 5\frac{4}{8}$ and $2\frac{5}{8}$; subtract to get $2\frac{7}{8}$. Always simplify at the end so the answer is clean and useful.



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