

Add Mixed Numbers with Unlike Denominators



When adding mixed numbers with unlike denominators, it helps to write the problems in vertical form.

Add $2\frac{4}{5} + 5\frac{1}{4}$.

Step 1

Find the least common denominator (LCD).

Multiples of 5: 5, 10, 15, 20, ...

Multiples of 4: 4, 8, 12, 16, 20, ...

The LCD is 20.

Step 2

Rename each mixed number using the LCD.

$$2\frac{4}{5} = 2\frac{16}{20}$$

$$5\frac{1}{4} = 5\frac{5}{20}$$

Step 3

Write the problem in vertical form.

Add the fractions. Then add the whole numbers. Write the answer in simplest form.

$$\begin{array}{r} 2\frac{4}{5} = 2\frac{16}{20} \\ + 5\frac{1}{4} = + 5\frac{5}{20} \\ \hline 7\frac{21}{20} = 8\frac{1}{20} \end{array}$$

Add. Write your answer in simplest form.

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

Multiples of 6: _____

Multiples of 3: _____

LCD: _____

So, $4\frac{5}{6} + 3\frac{2}{3} =$

2. $2\frac{3}{8} + 9\frac{2}{5}$

Multiples of 8: _____

Multiples of 5: _____

LCD: _____

So, $2\frac{3}{8} + 9\frac{2}{5} =$

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

4. $6\frac{5}{16} + 8\frac{1}{4} =$ _____

5. $7\frac{3}{4} + 7\frac{5}{12} =$ _____

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

7. $9\frac{1}{2} + 4\frac{5}{8} =$ _____

8. $8\frac{1}{6} + 6\frac{7}{8} =$ _____

9. $6\frac{2}{3} + 2\frac{5}{8} =$ _____

10. $1\frac{3}{4} + 4\frac{1}{2} =$ _____

11. $10\frac{1}{5} + 3\frac{7}{8} =$ _____

12. $15\frac{2}{3} + 20\frac{3}{4} =$ _____

13. $35\frac{4}{5} + 18\frac{1}{2} =$ _____

14. $45\frac{3}{8} + 50\frac{5}{6} =$ _____