Rational Numbers Example

Add fractions by using a least common denominator.

PROBLEM

3/4 + 5/6

Step-by-step solution

1

Find a common denominator

The least common multiple of 4 and 6 is 12.

lcm(4, 6) = 12

2

Rewrite each fraction

Scale numerator and denominator by the same factor.

3/4 = 9/12; 5/6 = 10/12

3

Add the numerators

Keep the denominator and add 9 and 10.

9/12 + 10/12 = 19/12

4

Write a mixed number

The fraction is in lowest terms.

19/12 = 1 7/12

ANSWER

The exact sum is 19/12, or 1 7/12.

Decimal check: 0.75 + 0.8333... = 1.5833...

The exact form and verification are shown above.