

Adding Fractions with Unlike Denominators

Danisha ate $\frac{2}{3}$ cup of yogurt at breakfast. She ate $\frac{1}{4}$ cup of yogurt at lunch. How much yogurt did she eat today?

You can add fractions with unlike denominators.

Step 1: Find the least common denominator of the two fractions.

multiples of 3: 3, 6, 9, 12, 15

multiples of 4: 4, 8, 12, 16, 20

$$\frac{2}{3} = \frac{8}{12} \text{ and } \frac{1}{4} = \frac{3}{12}$$

Step 2: Once you have equivalent fractions with the same denominator, add the numerators.

$$8 + 3 = 11$$

$$\text{So, } \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$$

Step 3: Place the sum over the common denominator and simplify your fraction if possible.

Danisha ate $\frac{11}{12}$ cup of yogurt today.

For **1** through **5**, find each sum. Simplify if possible.

$$\begin{array}{r} 1. \quad \frac{3}{5} \\ + \frac{1}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \frac{2}{9} \\ + \frac{2}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \frac{3}{8} \\ + \frac{3}{12} \\ \hline \end{array}$$

$$4. \quad \frac{1}{4} + \frac{1}{6} + \frac{3}{4} =$$

$$5. \quad \frac{2}{9} + \frac{1}{9} + \frac{1}{6} =$$

6. Kevin and some friends baked different loaves of bread and cut them into different numbers of slices. They ate $\frac{1}{4}$ of one loaf, $\frac{1}{4}$ of another, $\frac{5}{12}$ of another, and $\frac{1}{12}$ of another. Did they eat the equivalent of a whole loaf?
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7. Cathy wakes up at 7:00 A.M. each morning. She spends $\frac{1}{10}$ hour making her bed, $\frac{1}{5}$ hour eating breakfast, and $\frac{1}{2}$ hour getting ready for school. How long does Cathy spend doing these things each morning?
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