

Adding fractions

Example

$$\begin{array}{c}
 \text{X } 5 \\
 \frac{2}{3} + \frac{4}{5} = \frac{10}{15} + \frac{12}{15} \\
 \text{X } 5
 \end{array}$$

$$= \frac{22}{15} \text{ or } 1 \frac{7}{15}$$

Step 1: Are the denominators the same? If not convert the fractions to equivalent fractions, with the same denominator. (Look for the lowest common multiple)

$$\begin{array}{r}
 3 \ 6 \ 9 \ 12 \ \underline{15} \\
 5 \ 10 \ \underline{15}
 \end{array}$$

Step 2: Add the fractions

Step 3: Check to see if you can simplify the fraction or write it as a mixed number fraction.

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Adding fractions

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

2. $\frac{6}{10} + \frac{4}{5}$

3. $\frac{4}{9} + \frac{2}{3}$

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

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Subtracting Fractions

Follow the same steps as you did for addition, make sure both fractions have the same denominator, but this time subtract.

$$1. \quad \frac{4}{10} - \frac{1}{5}$$

$$2. \quad \frac{7}{9} - \frac{1}{3}$$

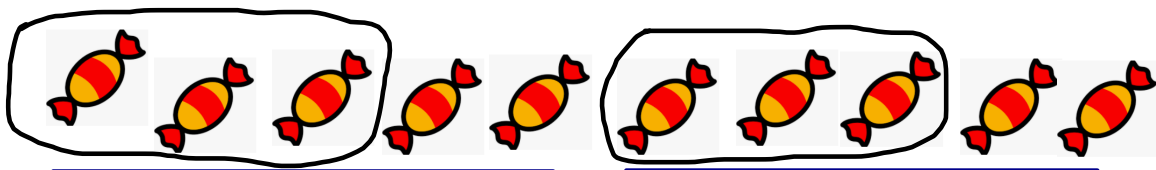
$$3. \quad \frac{8}{3} - \frac{5}{6}$$

$$4. \quad \frac{7}{12} - \frac{1}{8}$$

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Finding fractions of a set

Example



Circle $\frac{3}{5}$ of the sweets.

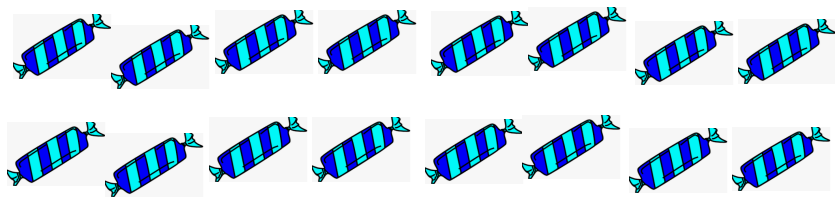
Remember $\frac{3}{5}$

means 3 in every group of 5

Find groups of 5 .
circle 3 in each group.

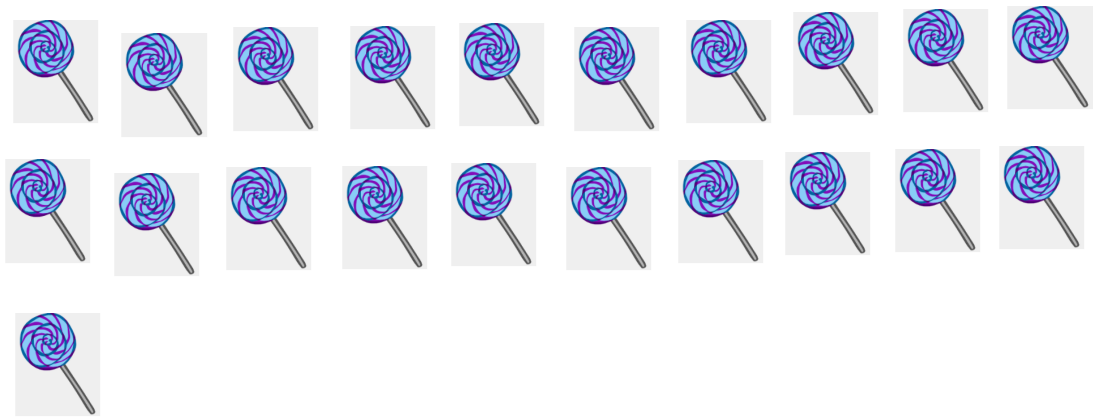
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Circle $\frac{3}{4}$ of the sweets



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Circle $\frac{2}{7}$ of the lollies



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Finding fractions of an amount

Find $\frac{2}{3}$ of 198

Step 1

$$\begin{array}{r} 0 \ 6 \ 6 \\ 3 \overline{) 198} \end{array}$$

Step 2

$$\begin{array}{r} 6 \ 6 \\ \times 2 \\ \hline 1 \ 3 \ 2 \\ \hline \end{array}$$

$$\frac{2}{3} \text{ of } 198 = 132$$

Just like when we found fractions of a set, we need to look at the denominator to see what groups we are interested in.

Remember $\frac{2}{3}$ means 2 in every group of 3.

So for Step 1 we have to find out how many groups of 3 there are in 198. To do this we divide by 3.

So, there are 66 groups of 3 in 198.

As we are finding $\frac{2}{3}$ of 198 we need 2 from each group. So step 2 is to multiply 66 by the numerator 2.

Fast Forward

To find fractions of an amount we divide by the denominator and then multiply that answer by the numerator.

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Finding fractions of an amount

1. Find $\frac{3}{4}$ of 172

2. Find $\frac{4}{5}$ of 455

3. Find $\frac{2}{3}$ of 642

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