

Adding and Subtracting Fractions Applications (Day 2)

Review how to find the Least Common Multiple (LCM)

24 8 and 12 $4 \overline{) 8 \ 12}$ $2 \overline{) 8 \ 12}$
 36 12 and 18 $2 \overline{) 3}$ $2 \overline{) 4 \ 6}$
 10 and 12 $6 \overline{) 12 \ 18}$ $2 \overline{) 2 \ 3}$
 12 and 24

Fraction Word Problems (Addition/Subtraction)

When solving word problems, make sure to UNDERSTAND THE QUESTION.

Look for bits of information that will help get to the answer. Keep in mind that some sentences may not have key words or key words might even be misleading.

USE COMMON SENSE when thinking about how to solve word problems. The first thing you think of might be the best way to solve the problem.

Here are some KEY WORDS to look for in word problems:

Sum, total, more than: mean to add

Difference, less than, how much more than: mean to subtract

Ex. 1: If brand X can of beans weighs $15\frac{1}{2}$ ounces and brand Y weighs $12\frac{3}{4}$ ounces, how much larger is the brand X can?

$15\frac{1}{2} = 15\frac{2}{4} = 14\frac{6}{4}$
 $-12\frac{3}{4} = 12\frac{3}{4} = 12\frac{3}{4}$
 $\hline 2\frac{3}{4}$

means to subtract

Borrow from the whole number and add to the fraction

$$- \frac{30}{4} = - \frac{62}{4} = \frac{11}{4}$$

Ex. 2: Find the total snowfall for this year if it snowed $\frac{1}{10}$ inch in November, $2\frac{1}{3}$ inches in December and $1\frac{3}{4}$ inches in January.

$\frac{1}{10} = \frac{6}{60}$
 $2\frac{1}{3} = 2\frac{20}{60}$
 $+1\frac{3}{4} = 1\frac{45}{60}$
 $\hline 3\frac{71}{60} = 4\frac{11}{60}$

means to add

Simplify.

Now you try:

Solve the following add/subtract fraction word problems

1. Find the total width of 3 boards that $1\frac{3}{4}$ inches wide, $\frac{7}{8}$ inch wide, and $1\frac{1}{2}$ inches wide.

$$\begin{array}{r}
 1\frac{3}{4} \\
 \frac{7}{8} \\
 1\frac{1}{2} \\
 \hline
 \end{array}
 +
 \begin{array}{r}
 \frac{7}{8} \\
 1\frac{1}{2} \\
 \hline
 \end{array}
 +
 \begin{array}{r}
 \frac{7}{8} \\
 1\frac{1}{2} \\
 \hline
 \end{array}
 = 4\frac{1}{8} \text{ in}$$

2. A 7.15H tire is $6\frac{5}{8}$ inches wide and a 7.15C tire is $4\frac{3}{4}$ inches wide. What is the difference in their widths?

$$\begin{array}{r}
 6\frac{5}{8} \\
 - 4\frac{3}{4} \\
 \hline
 2\frac{1}{8}
 \end{array}$$

Have HW out too!
Warm up 10/10:

The scale on a wall map is 1 inch = 55 miles. What is the distance on a map between two cities that are 220 miles apart?

$$\frac{55x = 220}{55} \quad \frac{1 \text{ in} = 55 \text{ miles}}{x = 220 \text{ miles}}$$

$x = 4 \text{ in}$