

PSS: Choose the Operation

It is often helpful to think about the kind of answer you need to solve a problem before you decide which operation or operations to use. Here are some different problem types and the operations used to solve them.

Add to combine two or more like measures, such as length or weight.

Lina puts $2\frac{1}{2}$ gr of flour into a can containing 5 gr of flour. The total amount of flour in the can is $2\frac{1}{2} + 5$, or $7\frac{1}{2}$ gr.

Subtract to take away an amount or compare like measures.

Shadi spilled $2\frac{1}{4}$ gr of sugar out of a 10 gr bag. The sugar remaining in the bag weighs $10 - 2\frac{1}{4}$, or $7\frac{3}{4}$ gr.

There is $7\frac{3}{4} - 2\frac{1}{4}$, or $4\frac{1}{2}$ gr more sugar in the bag than was spilled.

Multiply to combine a number of equal measures or to calculate a new type of measure.

A square of $2\frac{1}{2}$ cm on each side has a perimeter of $4 \times 2\frac{1}{2}$, or 6 yd. The square also has an area of $2\frac{1}{2} \times 2\frac{1}{2}$, or $6\frac{1}{4}$ cm².

Divide to determine how many parts of equal size are in a measure or to determine the size of several equal parts.

A $9\frac{1}{2}$ cm long board is cut into 4 equal lengths. Each piece has a length of $9\frac{1}{2} \div 4$, or $2\frac{3}{8}$ cm.

If a 6 cm board is cut in $1\frac{1}{2}$ cm lengths, there will be $6 \div 1\frac{1}{2}$, or 4 pieces.

My Real Life

Examples:

A- Rami uses 4 ropes of $5\frac{2}{3}$ meters each. How many meters does he use?

$$4 \times 5\frac{2}{3} = 20\frac{2}{3} \text{ meters of rope.}$$

