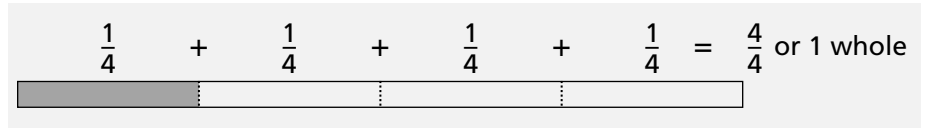




Dear Family:

Your child is learning about fraction concepts. Using fraction bars, students learn about unit fractions, or fractions that are just one part of the whole, such as $\frac{1}{2}$ or $\frac{1}{4}$.



Non-unit fractions are sums of unit fractions.

Unit fractions are used to convert mixed numbers, which have a whole-number part and a fractional part, to improper fractions, where the top number (numerator) is larger than the bottom number (denominator).

$$\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

$$2\frac{1}{4} = \frac{4}{4} + \frac{4}{4} + \frac{1}{4} = \frac{9}{4}$$

Fraction bars help students understand how to compare, add, and subtract fractions with like denominators: $\frac{3}{7}$

$$\frac{a}{d} + \frac{b}{d} = \frac{a+b}{d}$$

$$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$$

$$\frac{a}{d} - \frac{b}{d} = \frac{a-b}{d}$$

$$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$$

If $a > b$, then

$$\frac{1}{a} < \frac{1}{b} \text{ and } \frac{a}{d} > \frac{b}{d}$$

$$\frac{1}{3} < \frac{1}{2} \text{ and } \frac{3}{7} > \frac{2}{7}$$

These skills extend to fractions with unlike denominators. We rewrite each fraction with a common denominator, using multiplication to make an equivalent fraction.

$$\frac{1}{3} \xrightarrow{\times 5} \frac{5}{15}$$

We add and subtract mixed numbers by treating the whole-number part and the fractional part separately, ungrouping 1 whole, if needed.

$$\begin{array}{r} 4\frac{1}{3} \\ - 2\frac{7}{15} \\ \hline \end{array} = \begin{array}{r} 3\frac{20}{15} \\ - 4\frac{7}{15} \\ \hline 1\frac{13}{15} \end{array}$$

Sincerely,
Your child's teacher