

Key Vocabulary

Fraction Families

numerator

denominator

unit fraction

non-unit fraction

equivalent

quantities

whole

halves

thirds

quarters

fifths

sixths

sevenths

eighths

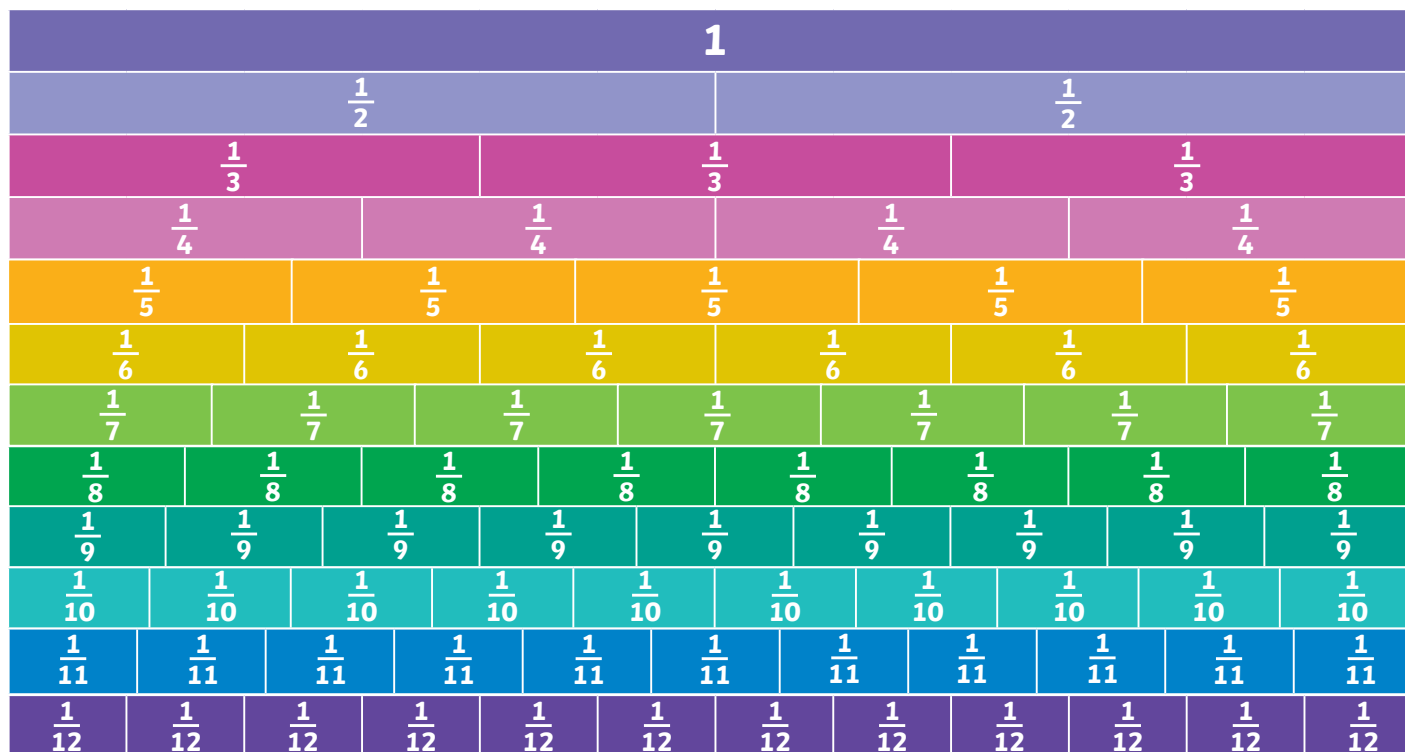
ninths

tenths

elevenths

twelfths

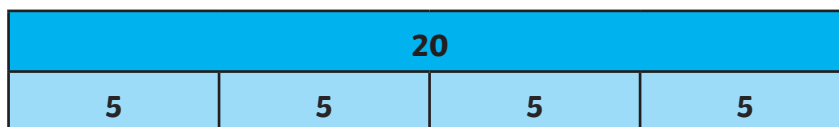
quantities



Fractions of Quantities

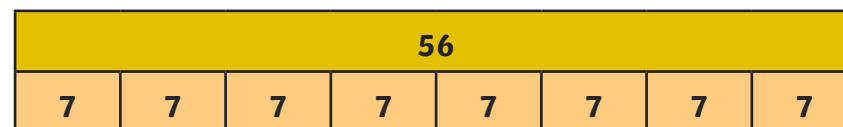
To find a fraction of a number, divide by the denominator and multiply by numerator.

To find quarters of 20:



$$\frac{1}{4} \text{ of } 20 = 5 \quad \frac{2}{4} \text{ of } 20 = 10 \quad \frac{3}{4} \text{ of } 20 = 15 \quad \frac{4}{4} \text{ of } 20 = 20$$

To find eighths of 56:

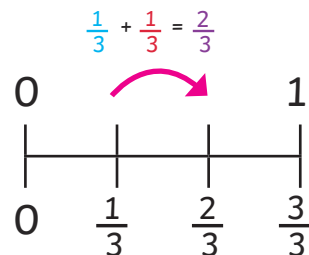


$$\begin{array}{llll} \frac{1}{8} \text{ of } 56 = 7 & \frac{2}{8} \text{ of } 56 = 14 & \frac{3}{8} \text{ of } 56 = 21 & \frac{4}{8} \text{ of } 56 = 28 \\ \frac{5}{8} \text{ of } 56 = 35 & \frac{6}{8} \text{ of } 56 = 42 & \frac{7}{8} \text{ of } 56 = 49 & \frac{8}{8} \text{ of } 56 = 56 \end{array}$$

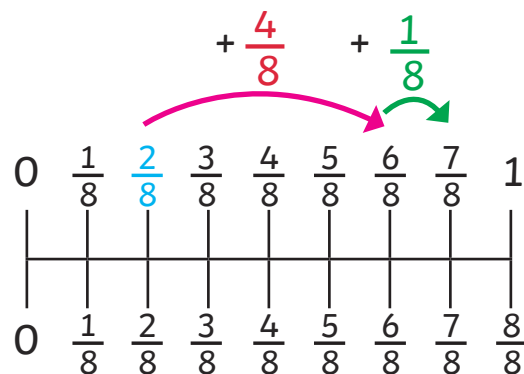
Adding Fractions

Fractions can be added when the denominators are the same.

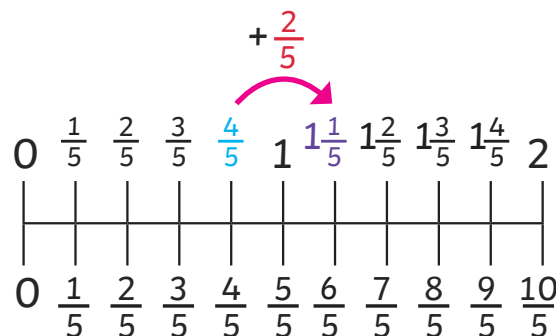
$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$



$$\frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$$



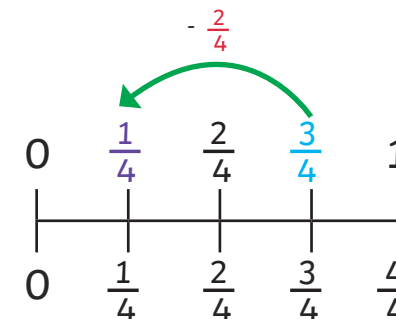
$$\frac{4}{5} + \frac{2}{5} = \frac{6}{5} \text{ or } 1\frac{1}{5}$$



Subtracting fractions

Fractions can be subtracted when the denominators are the same.

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



$$\frac{8}{6} - \frac{5}{6} = \frac{3}{6}$$

