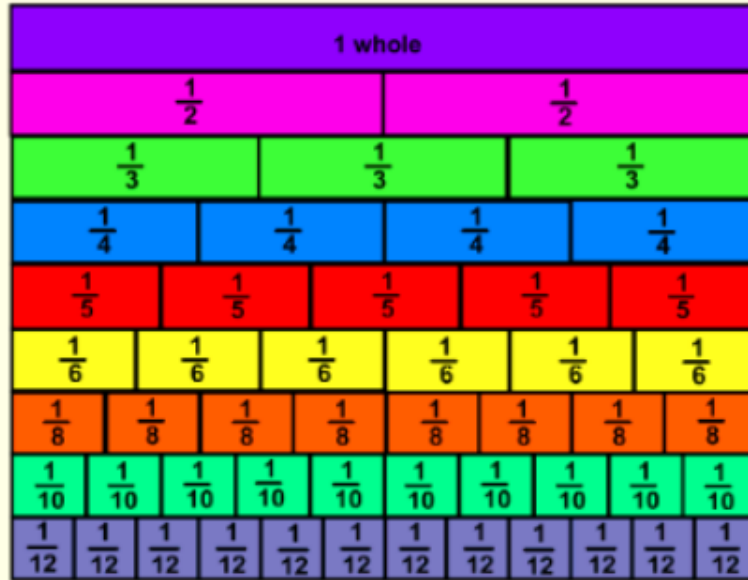


Key Vocabulary

half
quarter
whole
equal parts
three quarters
third
tenth
equivalent fractions
unit fraction
non-unit fraction
numerator
denominator
proper fractions
improper fractions

Equivalent Fractions



The fraction wall can help you find equivalent fractions. For instance ..

$$\frac{1}{3} = \frac{2}{6}$$

$$\frac{4}{5} = \frac{8}{10}$$

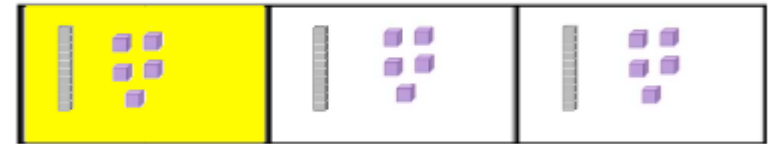
$$\frac{3}{4} = \frac{6}{8}$$

Fractions of Amounts

To find fractions of amounts we **divide by the denominator** and then **multiply by the numerator**.

$$\frac{1}{3} \text{ of } 45 = 15$$

To work this out we need to divide 45 by 3 (denominator) and then multiply the answer by 1 (numerator).



$$45 \div 3 = 15$$

$$15 \times 1 = 15$$

$$\frac{3}{5} \text{ of } 20 = 12$$

To work this out we need to divide 20 by 5 (denominator) and then multiply the answer by 3 (numerator)



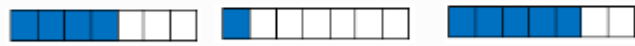
$$20 \div 5 = 4$$

$$4 \times 3 = 12$$

Adding Fractions

We can add fractions when the denominators are the same.

$$\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$$



$$\frac{3}{7} + \frac{1}{7} + \frac{2}{7} = \frac{6}{7}$$



$$\frac{5}{6} + \frac{4}{6} = \frac{9}{6}$$



This is called an **improper fraction** as the numerator is larger than the denominator.



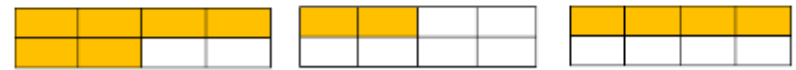
This can be converted into a **mixed number**.

There is $\frac{6}{6}$ which is 1 whole and $\frac{3}{6}$, therefore it is $1\frac{3}{6}$.

Subtracting Fractions

We can subtract fractions when the denominators are the same.

$$\frac{6}{8} - \frac{2}{8} = \frac{4}{8}$$



$$\frac{9}{7} - \frac{5}{7} = \frac{4}{7}$$



We can also subtract fractions from whole numbers.

$$1 - \frac{4}{6} = \frac{2}{6}$$

1 whole becomes

