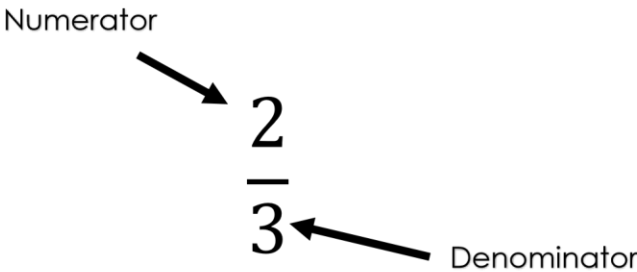


Fractions



Finding fractions of an amount:

$\frac{2}{3}$ of 300

- 1) Divide by the denominator
 - 2) Multiply the answer by the numerator
- 1) $300 \div 3 = 100$
- 2) $100 \times 2 = 200$
- $\frac{2}{3}$ of 300 = 200

Finding the whole from a fraction of an amount:

$\frac{3}{5}$ of a number is 90

- 1) Divide by the numerator
 - 2) Multiply the answer by the denominator
- 1) $90 \div 3 = 30$
- 2) $30 \times 5 = 150$
- The original number was 150

Types of Fractions:

$\frac{1}{3}$
Unit fraction

$\frac{2}{3}$
Non-unit fraction

$\frac{5}{3}$
Improper fraction

$1\frac{2}{3}$
Mixed number fraction

Adding and subtracting fractions:
Once the denominators are the same, add or subtract using the numerators.

$$\frac{3}{7} + \frac{2}{7} = \frac{5}{7}$$
$$\frac{4}{5} - \frac{3}{10} =$$
$$\frac{8}{10} - \frac{3}{10} = \frac{5}{10}$$

$$\frac{3}{7} \times 3 + \frac{1}{3} \times 7 =$$
$$\frac{9}{21} - \frac{7}{21} = \frac{16}{21}$$

Multiplying fractions:

When multiplying fractions together, multiply the two numerators together and the two denominators together.

$$\frac{3}{8} \times \frac{1}{5} = \frac{3}{40}$$

$$\frac{2}{3} \times \frac{4}{7} = \frac{8}{21}$$

Multiplying a fraction by a whole number:

When multiplying a fraction by a whole number, multiply the numerator by the whole number.

$$\frac{3}{8} \times 2 = \frac{6}{8}$$

$$5 \times \frac{4}{7} = \frac{20}{7} = 2\frac{6}{7}$$



Key Vocabulary



Common multiple - A number that can be seen in more than one set of multiplication facts

Denominator - The number at the bottom of the fraction that indicates how many equal parts something is divided into

Factor - A number that divides from a given number without a remainder

Fraction - A numerical quantity that is not a whole number

Improper fraction - A fraction where the numerator is equal to or greater than the denominator

Mixed number fraction - A fraction that includes a whole number and a proper fraction

Non-unit fraction - A proper fraction where the numerator is greater than 1

Numerator - The number at the top of a fraction that shows how many parts are being taken from the denominator

Simplify - Make something simpler or easier to understand

Unit fraction - A proper fraction where the numerator is 1

Dividing a fraction by a whole number:

When dividing a fraction by a whole number, there are two possible methods.

Either multiply the denominator by the whole number you are dividing by, or where the numerator can be divided by the divisor, divide the numerator by the whole number.

$$\frac{3}{8} \div 2 = \frac{3}{16}$$

$$\frac{4}{5} \div 4 = \frac{1}{5}$$