

Al Makassed Dawha School



FRACTIONS

Grade 5; Sec: _____

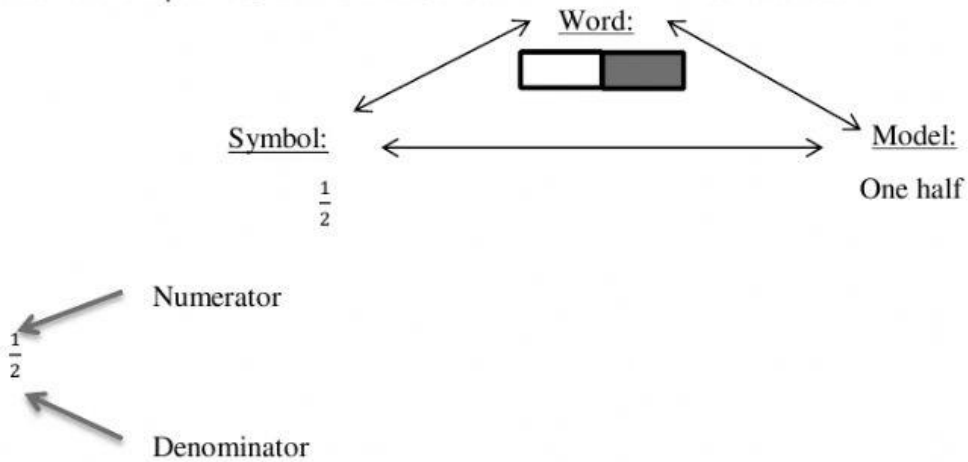
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Fractions (Revision)

A fraction is a part of a whole number. It can be represented as:



1) Complete the following table.

<u>Fraction</u>	<u>Model</u>	<u>Word Form</u>
$\frac{3}{5}$		
		Four sevenths
$\frac{7}{12}$		

2) Compare the following fractions by using $<$, $>$ or $=$.

$$\frac{5}{6} \bigcirc \frac{3}{6}$$

$$\frac{3}{7} \bigcirc \frac{6}{14}$$

$$\frac{4}{9} \bigcirc \frac{5}{12}$$

$$\frac{4}{5} \bigcirc \frac{5}{6}$$

$$\frac{2}{3} \bigcirc \frac{3}{5}$$

$$\frac{5}{6} \bigcirc \frac{7}{12}$$

$$1 \bigcirc \frac{7}{12}$$

$$1 \bigcirc \frac{2}{5}$$

$$\frac{8}{9} \bigcirc \frac{5}{6}$$

3) Order the following fractions in increasing order.

a) $\frac{1}{6}, \frac{5}{6}, \frac{2}{12}, \frac{3}{4}$

b) $\frac{5}{7}, \frac{1}{2}, \frac{5}{14}, \frac{3}{7}$

4) Order the following fractions in increasing order.

a) $\frac{5}{20}, \frac{3}{5}, \frac{3}{4}, \frac{1}{2}$

b) $\frac{9}{16}, \frac{1}{2}, \frac{1}{4}, \frac{3}{4}$

Fraction of a Number

Steps for finding the fraction of a whole number:

- 1- Divide the number by the denominator.
- 2- Multiply by the numerator.

Example:

Find $\frac{3}{4}$ of the number 36.

Step 1: $36 \div 4 = 9$

Step 2: $9 \times 3 = 27$

So, $\frac{3}{4}$ of 36 = 27

1) Find the fraction of each of the following numbers.

$\frac{3}{5}$ of 15 =

$\frac{2}{7}$ of 49 =

$\frac{7}{8}$ of 72 =

$\frac{1}{6}$ of 36 =

$\frac{5}{8}$ of 40 =

$\frac{3}{7}$ of 700 =

$\frac{1}{10}$ of 800 =

$\frac{2}{9}$ of 720 =

$\frac{1}{3}$ of 720 =

$\frac{5}{7}$ of 350 =

Equivalent fraction

Equivalent fractions are the **fractions** that have different numerator and **denominator** but are equal to the same value. For **example**, $\frac{2}{4}$ and $\frac{4}{8}$ both are equal to $\frac{1}{2}$.



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



To get equivalent fractions we multiply or divide the numerator and the denominator by the same number.

Example: $\frac{2 \times 4}{3 \times 4} = \frac{8}{12}$

$$\frac{6 \div 2}{8 \div 2} = \frac{3}{4}$$

1) Write 3 fractions equivalent to each of the following fraction.

a) $\frac{1}{2} = \text{-----} = \text{-----} = \text{-----}$

b) $\frac{5}{6} = \text{-----} = \text{-----} = \text{-----}$

c) $\frac{1}{8} = \text{-----} = \text{-----} = \text{-----}$

d) $\frac{20}{50} = \text{-----} = \text{-----} = \text{-----}$

e) $\frac{24}{36} = \text{-----} = \text{-----} = \text{-----}$

2) Reduce each fraction to its simplest form.

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

$$\frac{25}{35} =$$

$$\frac{4}{12} =$$

$$\frac{40}{60} =$$

$$\frac{30}{90} =$$

$$\frac{35}{70} =$$

$$\frac{18}{20} =$$

$$\frac{35}{45} =$$

$$\frac{24}{32} =$$

$$\frac{50}{100} =$$

$$\frac{30}{150} =$$

$$\frac{10}{25} =$$

Proper and Improper Fractions

A *proper fraction* is a fraction whose *numerator* is *smaller* than its *denominator*.

An *improper fraction* is a fraction whose *numerator* is *equal* to or *greater* than its *denominator*.

Examples: $\frac{3}{4}$, $\frac{2}{11}$, and $\frac{7}{19}$ are proper fractions, while $\frac{5}{2}$, $\frac{8}{5}$, and $\frac{12}{11}$ are improper fractions

1) Distribute the following fractions as proper or improper fractions:

$$\begin{array}{ccccc} \frac{8}{20} & \frac{18}{15} & \frac{10}{10} & \frac{27}{56} & \frac{32}{15} \\ \frac{12}{5} & \frac{7}{100} & \frac{8}{8} & \frac{11}{45} & \frac{98}{40} \end{array}$$

Proper Fractions	Improper Fractions

2) Order the following fractions in increasing order.

a) $\frac{17}{17}$, $\frac{13}{15}$, $\frac{18}{10}$

b) $\frac{35}{16}$, $\frac{20}{20}$, $\frac{12}{30}$

c) $\frac{1}{4}$, $\frac{16}{5}$, $\frac{25}{25}$, $\frac{2}{4}$

d) $\frac{3}{10}$, $\frac{9}{10}$, $\frac{19}{19}$, $\frac{8}{3}$

Mixed numbers

Mixed number: is a number that is a whole number and a fraction together.

Example: $1\frac{4}{5}$



To convert an improper fraction into a mixed number:

- 1- Divide the numerator by the denominator.
- 2- Write down the whole number result.
- 3- Use the remainder as the new numerator over the denominator.

Example: $\frac{26}{3} = 8\frac{2}{3}$

$$\begin{array}{r} 8 \\ 3 \overline{) 26} \\ \underline{- 24} \\ 2 \end{array}$$

To convert a mixed fraction to an improper fraction:

- 1- Multiply the whole number part by the fraction's denominator.
- 2- Add that to the numerator.
- 3- Then write the result on top of the denominator.

Example: $2\frac{4}{5} = \frac{14}{5}$

$$5 \times 2 = 10$$

$$10 + 4 = 14$$

- 1) Write the following improper fractions as mixed number.

$$\frac{22}{7} =$$

$$\frac{17}{4} =$$

$$\frac{35}{8} =$$

$$\frac{9}{4} =$$