Al Makassed Dawha School

FRACTIONS

Grade 5; Sec: ____

Name: _____

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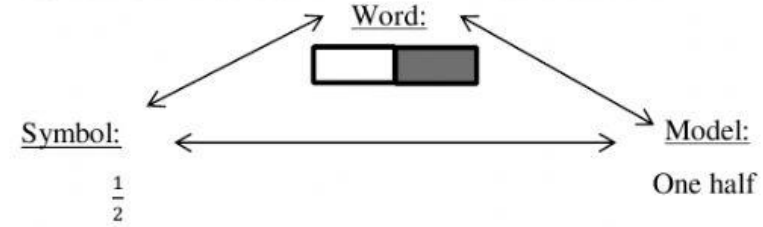
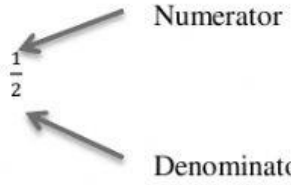
Fractions (Revision)

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



$\frac{1}{2}$



1) Complete the following table.

Fraction	Model	Word Form
$\frac{3}{5}$		
		Four sevenths
$\frac{7}{12}$		

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

$\frac{5}{6} \bigcirc \frac{3}{6}$ $\quad \frac{3}{7} \bigcirc \frac{6}{14}$ $\quad \frac{4}{9} \bigcirc \frac{5}{12}$

$\frac{4}{5} \bigcirc \frac{5}{6}$ $\quad \frac{2}{3} \bigcirc \frac{3}{5}$ $\quad \frac{5}{6} \bigcirc \frac{7}{12}$

$1 \bigcirc \frac{7}{12}$ $\quad 1 \bigcirc \frac{2}{5}$ $\quad \frac{8}{9} \bigcirc \frac{5}{6}$

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 =

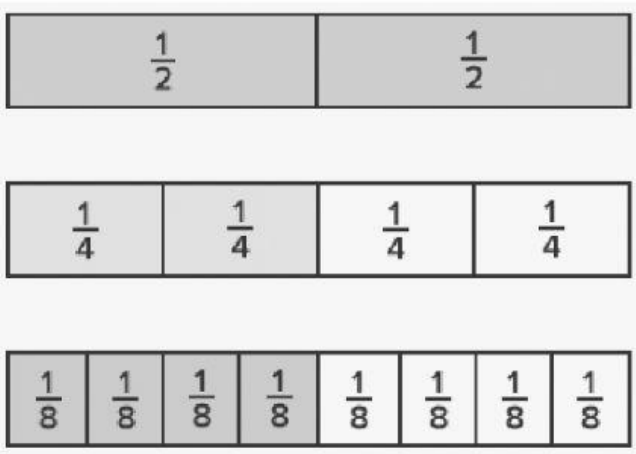
$\frac{2}{9}$ of 720 =

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

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

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

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

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

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:

$\frac{8}{20}$ $\frac{18}{15}$ $\frac{10}{10}$ $\frac{27}{56}$ $\frac{32}{15}$

$\frac{12}{5}$ $\frac{7}{100}$ $\frac{8}{8}$ $\frac{11}{45}$ $\frac{98}{40}$

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

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

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.

$\frac{22}{7}=$

$\frac{17}{4}=$

$\frac{35}{8}=$

$\frac{9}{4}=$