

New Module / Book : The Four Operations
on Fractions

Lesson 1 : Understanding Fractions (Ratio) and Their Notation

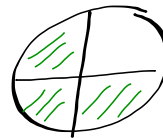
ratio $1 : 2 = \frac{1}{2}$ = fractional form (one type: fractional form)

$\frac{1}{2}$
 ↙ numerator = what you have
 ↘ denominator = how whole is broken up

ex I ate $\frac{1}{2}$ a pizza.



ex I ate $\frac{3}{4}$ of a pizza.



Definition: a fraction is a number that represents a certain numerator

of parts w respect to a whole.
 denominator.

- Using the illustrations below,
 - identify the unit of reference;
 - state the number of parts into which it is divided;
 - specify the number of shaded parts.

a)



- unit of reference: chocolate bar
- number of parts into which it is divided: 9 pieces
- number of parts of the whole which are shaded: 3 pieces.

you do $1.2 - 1.7$
 .not #3 on 1.7.

I ate $\frac{3}{9}$ of chocolate bar.
 There's $\frac{6}{9}$ of the bar left.

Fractions in Words and Naming/Labeling
Describing/qualifying
Fractions

→ fractions

$$\frac{1}{2}$$



$$\frac{2}{2}$$



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



$$\frac{1}{3}$$

$$\frac{2}{3}$$

$$\frac{3}{3}$$

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



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



$$\frac{7}{3}$$

$$\frac{1}{4}$$

$$\frac{2}{4}$$

$$\frac{1}{5}$$

$$\frac{2}{5}$$

$$\frac{4}{10}$$

→ words

- one half
- a half
- 1 over two

- two over two
- two halves

- three over two
- three halves

- one third
- a third
- 1 over three

- two thirds
- 2 over three
- 3 thirds

- four thirds

- one quarter
- one fourth

- 2 quarters
- 2 fourths

- 1 fifth

- 2 fifths

- 4 sixteenths

→ definitions

unit fraction: any fraction w a top of 1.
 ex $\frac{1}{2}$, $\frac{1}{4}$

ex of integer
 · proper fraction bigger den

· improper fraction: a fraction w numerator greater than denominator ex $\frac{3}{2}$, $\frac{4}{2}$

· a mixed number: a # that has an integer and a fraction. 1.12

ex. $1 \frac{1}{2} = \frac{3}{2} = 1.5$
 integral part → 1
 fractional part → $\frac{1}{2}$

ex I ate one and a half pizzas

You do remain questions in handout :)

