dec 4, 2020

Evaluating w BEDMAS with Fractions

note : the operation between a number and bracket is "x"

e.x. evaluate

numerator → $\dfrac{(3\times[6-2\times(1+(-2))]+1)}{5}$ ← denominator

step i. Read

step ii. Put brackets around all of numerator.

step iii follow

1. Brackets
2. Exponent
3. Division / Multiplication / Addition
4. Subtraction

$\dfrac{(3\times[6-2\times(-1)]+1)}{5}$

$\dfrac{(3\times[6-(-2)]+1)}{5}$

$\dfrac{(3[6+2]+1)}{5}$

$\dfrac{(3\times[8]+1)}{5}$

$\dfrac{(24+1)}{5}$

$\dfrac{25}{5}$

5

21. $\dfrac{[6\times(-2)+[5\times(-9)]-(-18\times4)}{-3}$

6.13

Understanding What Fractions Are

num. → 3 · three forth

den → 4 · three over four

three quarters

Definition: a fraction is a number that represents a certain # of (numerator) parts with respect to a whole. (denominator)

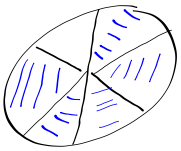
0.25 · 0.25 · 0.25 · 0 · 15 · 0

e.x. pizza

I took $\frac{3}{4}$ ← what you have ← how whole is broken up.

of the pizza

e.x. pizza

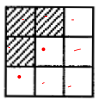


I ate $\frac{5}{6}$

of the pizza

1. 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)



the whole

— unit of reference: a chocolate bar / square (bottom)

— number of parts into which it is divided: 9

— number of parts of the whole which are shaded: 3 (what you have)

I have 3/9 of a chocolate bar.

Do 1.2-1.7

Fractions in Word / Labeling Different Fractions

fractions | words | definitions

ex $\frac{1}{2}$ unit fraction $= 0.5$

- a half
- one half
- 1 over two

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

- two halves
- two over two

$\frac{3}{2}$ improper fraction $= 1.5$

- three halves
- three over two

$1\frac{1}{2}$

ex $\frac{1}{3}$

- one third
- one over three

$\frac{2}{3}$

- two thirds
- two over three

$\frac{1}{4}$ unit fraction

- one fourth
- one over four
- a/one quarter

$\frac{2}{4} = 0.5$

- two over four
- two fourths
- two quarters.

ex $\frac{1}{5}$

- one over five
- one fifth

ex $\frac{2}{5}$

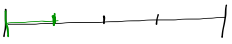
- two over five
- two fifths

improper

ex. $\frac{7}{6}$

- seven sixths

unit fraction: a fraction with numerator = 1

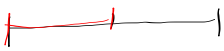


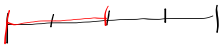
improper fraction: a fraction with num. greater than denominator

equivalent fractions:

what we have → ex → $\frac{1}{2} = \frac{2}{4} = 0.5$

how broken up





P 1.7 starting #3

→ 1.16

Simplifying Fractions (to see which fractions are equivalent)

Definition: Equivalent fractions have same value but forms.

e.x. $\frac{2}{4} = \frac{1}{2} = 0.5$ e.x. cat = 1b9

- Simplify:

- $\frac{12}{30} \div \frac{6}{6}$

$\frac{2}{5}$

step i. list all divisors of top. (a # that divides evenly into 12. whole #.)

- 12: 1, 2, 3, 4, (6), 12

step ii. list divisors of bottom.

- 30: 1, 2, 3, 5, (6), 10, 15, 30

step iii Pick the greatest common divisors. (highest) (same) GCD

step iv. Divide top and bottom by GCD: 6

p 3.5 Ex 3.2 # 1

$\frac{12}{30} = 0.4$ $\frac{2}{5} = 0.4$