

Fractions & Decimals: Notes

Fractions;

Fractions:-a part over a whole

-format: 9 (part) b (whole)

Equivalent

Fractions: Fractions that equal each

other

Example: 2 = 1 x2 = 4

171f you find the LCM, which is 4 and multiply 2 in the numerator and denominator you will get equal fractions

Move examples:

$$\frac{3}{4} = \frac{9 \div 3 \div 3}{12 \div 3 \div 4}$$
 $\frac{11}{33} = \frac{11}{33} \times \frac{11}{33} \times \frac{11}{33}$

comparing Fractions: Find the LCM of the denominators and compare 2 or more fractions to see if they are equal, greater than, or less than

Example: 3 ? 16 1. Make the fractions equivalent (common denominator)

12: 6x2= 12 2. Find the new fraction and compare it to the other fraction 3 7 2 other traction, 12 7 12 3. Final answer



Operations with Fractions!

Adding & subtracting with Like (same) Denominators: • Keep denominator the some · Add or subtract numerators as usual Examples: 0 7 + 2 = 12 or 3 · Keep 12 the same · Add 7+2 to get 9 E = = = 5 Adding & subtracting with Unlike Denominators: ouse the LCM to find common (same) penominators · use new fractions from new denominators · Add or subtract numerators as usual Examples: 3 9 + 6 号+tx2=元 · + 글 - !! * You have to have common (same) denominators when adding or subtracting fractions * bepending on the fractions given, you might need to Find 2 new fractions instead of I, like in example 4 Adding & subtracting with mixed numbers: • change the mixed numbers to improper tractions (multiply the denominator and whole # then add the numerator) · Find the LCM and find common denominators · Add or subtract as usual · convert answer to simplest form or mixed # (divide w Examples: 5 1 +



Multiplying...

Fractions with whole Numbers:

- · Dut whole number over I
- other & demonstrators with each other
- · convert answer into simplest form (reduce) (if needed)

Fractions with Fractions:

- officer a denominators with each other
- · convert answer into simplest town (reduce) (if needed)

Fractions with Mix ed Numbers:

- · convert mixed # into an
- · multiply fraction like you would regularly





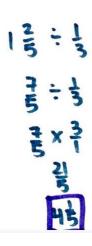


Division with Fractions:

- Division is just like multiplying fractions, but there is I extra step
- once you have the fractions or improper fractions you are dividing, switch the numerator and denominator of the 2nd fraction, then multiply regularly

Examples:







Decimals' whole number plus a fraction in decimal form by dividing the denominator into the numerotor

Example:

operations with pecimals...

· operations with decimals are very simple

Adding or subtracting decimals:

· Line up the decimal points vertically · Add or subtract as would

Examples: 51.7 + 6.12

6.12 - 5.1

6.12 -5.12

Multiplying deamais:

 Multiply as if there is no decimal
 count the number of decimal places in the 2 #s
 you are multiplying and skip that many places in your answer

Example: 6-71 x 5.2 = 34-892

Dividing Decimals

· Multiply the divisor till it is fully a whole number . Do the same to the dividend, then divide as usual

Evample: 2.198 - 0.07