



UNIT 2:FRACTIONS

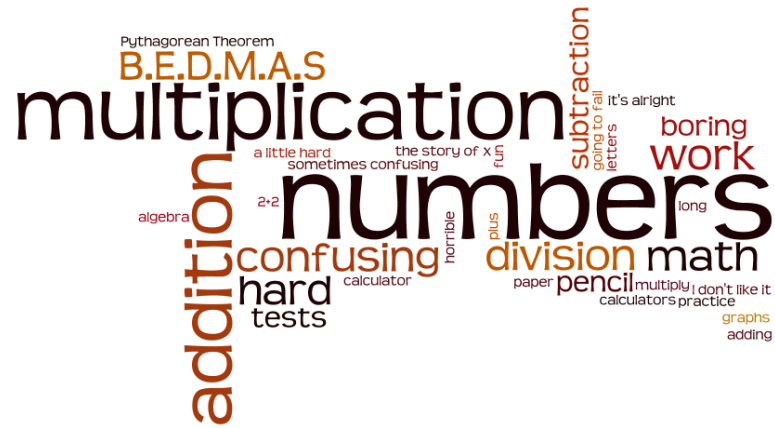
WHAT IS A FRACTION?

Turn to a person at your pod and discuss.

Try to decide on one definition that you can agree on.

You have 2 minutes to come up with a definition. Write it on a whiteboard.

WORD WALL



Words that I know

You get 1 minute to think of words related to fractions that you remember.

The objective here is just to write as many vocabulary words you can think of that relate to fractions.



WORD WALL

Now that you have gone through and created a list of words related to fractions.

Star the ones that you think are most important.

Think about why they are important, why do you need to know them?

WHAT WORDS OR TERMS ARE MOST IMPORTANT FOR LEARNING FRACTIONS?

Phone time!!

Text CASSIEBUCK472 to 37607 once to join.

or

You can use a laptop and reply at this link: <https://pollev.com/cassiebuck472>

After joining, you may send a text or respond with the words you think are important for fractions.

WORD WALL CREATION

I will give your group one of the words that is important for fractions, a piece of paper and pencil crayons.

- Your goal is to write the word and create an image to represent it.
- These will go onto my math word wall.



ADDING AND SUBTRACTING FRACTIONS

To add or subtract fractions we follow four steps;

- 1) Determine a common denominator.
- 2) Write equivalent fractions
- 3) Add or subtract the fractions accordingly.
- 4) Write the fraction in lowest terms.

ADDING AND SUBTRACTING FRACTIONS

- Multiples of 3;
- Multiples of 4;
- The common denominator is;

Example $\frac{2}{3} + \frac{1}{4} = ?$

ADDING AND SUBTRACTING FRACTIONS

- Multiples of 4;
- Multiples of 8;
- The common denominator is;

Example $\frac{3}{4} - \frac{1}{8} = ?$

EXAMPLES-PROPER FRACTIONS

$$a) \frac{4}{5} - \frac{2}{10} = ?$$

$$b) \frac{1}{6} + \frac{1}{4} = ?$$

EXAMPLES-MIXED NUMBERS

$$a) 2\frac{3}{4} + \frac{1}{8} = ?$$

$$b) 1\frac{2}{3} + 2\frac{1}{5} = ?$$

REVIEW

How do I add this fraction?

$$\frac{3}{2} + \frac{4}{5} =$$

How do I subtract this
Fraction?

$$\frac{2}{3} - \frac{1}{4}$$

MULTIPLYING FRACTIONS

To multiply fractions

1. Multiply the numerators of the fractions to get the new numerator.
2. Multiply the denominators of the fractions to get the new denominator.
3. Simplify the fractions if not in lowest terms.

EXAMPLE-MULTIPLYING

To multiply fractions

1. Multiply the numerators of the fractions to get the new numerator.
2. Multiply the denominators of the fractions to get the new denominator.
3. Simplify the fractions if not in lowest terms.

$$\frac{3}{4} \times \frac{4}{7}$$

EXAMPLE-MULTIPLYING

To multiply fractions

1. Multiply the numerators of the fractions to get the new numerator.
2. Multiply the denominators of the fractions to get the new denominator.
3. Simplify the fractions if not in lowest terms.

$$5 \times \frac{3}{20}$$

CALCULATE

$$a) \frac{3}{5} \times \frac{3}{7}$$

$$b) \frac{4}{5} \times \frac{13}{14}$$

DETERMINE

$\frac{2}{3}$ of $\frac{4}{7}$.

REVIEW

What does the word "of" mean?

How do you multiply fractions?

What is an improper fraction?

Discuss with your table and come up with an answer for all three questions

REMEMBER!

To create an improper fraction:

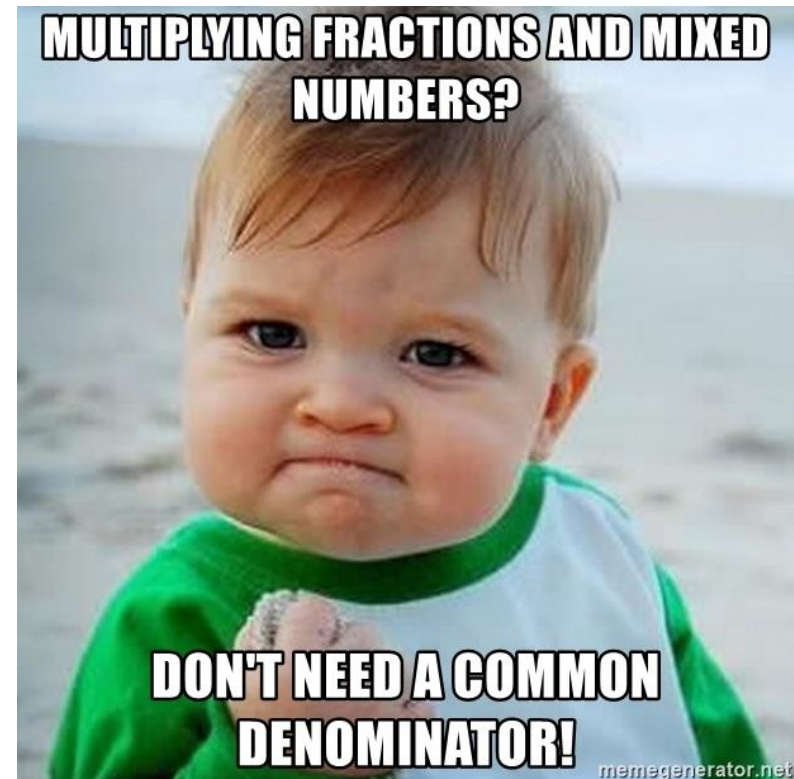
1. Multiply the whole number by the denominator
2. Add the answer to the numerator
3. Write the summed answer over the denominator

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

MULTIPLYING MIXED NUMBERS

To multiply mixed numbers

1. Put the mixed number into an improper fraction
2. Multiply the numerators of the fractions to get the new numerator.
3. Multiply the denominators of the fractions to get the new denominator.
4. Simplify the fractions if not in lowest terms.



EVALUATE

To multiply mixed numbers

1. Put the mixed number into an improper fraction
2. Multiply the numerators of the fractions to get the new numerator.
3. Multiply the denominators of the fractions to get the new denominator.
4. Simplify the fractions if not in lowest terms.

$$5\frac{3}{5} \times \frac{1}{2}$$

EVALUATE

To multiply mixed numbers

1. Put the mixed number into an improper fraction
2. Multiply the numerators of the fractions to get the new numerator.
3. Multiply the denominators of the fractions to get the new denominator.
4. Simplify the fractions if not in lowest terms.

$$3\frac{2}{6} \times \frac{1}{4}$$

EXAMPLES

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

$$b) 4\frac{10}{11} \times 1\frac{2}{6}$$

REVIEW

1. How do you multiply fractions?
2. How do you convert a mixed number to a fraction?

**TWO AND A HALF LAPS OF A RUNNING TRACK
EQUAL 1 KM. HOW MANY LAPS EQUAL 3 KM?**

THERE ARE 30 STUDENTS IN A CLASS. FOUR FIFTHS OF THEM HAVE BROWN EYES. HOW MANY STUDENTS HAVE BROWN EYES?

SAMANTHA HAS $\frac{5}{8}$ OF A CUP OF POWDERED SUGAR. SHE SPRINKLES $\frac{1}{2}$ OF THE SUGAR ONTO A PLATE OF BROWNIES AND SPRINKLES THE REST ONTO A PLATE OF LEMON COOKIES. HOW MUCH SUGAR DOES KIERA SPRINKLE ON THE BROWNIES?

A MINIBUS THAT SEATS 12 PEOPLE IS $\frac{3}{4}$ FULL. HOW MANY PEOPLE ARE SEATED ON THE MINI BUS?

PRACTICE QUESTIONS

Pages 49-50 Questions # 1, 3, 4, 5, 7, 15

Pages 55-56 Questions # 3, 5, 6, 8, 9, 10, 11, 12, 15

Pages 61-62 Questions # 3, 4, 7, 8, 11

DIVIDING FRACTIONS

To divide fractions;

1. Flip the second fraction to create the reciprocal
2. Multiply by the reciprocal of the second fraction
3. Simplify the fractions if not in lowest terms.

$$\frac{4}{5} \times \frac{2}{1} = \frac{8}{5} \text{ or } 1\frac{3}{5}$$
$$\frac{1}{2} \times \frac{2}{1} = 1 \text{ - Reciprocal}$$

DIVIDING FRACTIONS

To divide fractions;

1. Flip the second fraction to create the reciprocal
2. Change the divide symbol to the multiplication symbol
3. Multiply by the reciprocal of the second fraction
4. Simplify the fractions if not in lowest terms.

$$\frac{2}{5} \div \frac{3}{7}$$

DIVIDING FRACTIONS

To divide fractions;

1. Flip the second fraction to create the reciprocal
2. Change the divide symbol to the multiplication symbol
3. Multiply by the reciprocal of the second fraction
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$$\frac{3}{8} \div \frac{4}{10}$$

EXAMPLES

$$a) \frac{17}{20} \div \frac{1}{2}$$

$$b) \frac{4}{15} \div \frac{3}{4}$$

EXAMPLES

$$c) \frac{15}{7} \div \frac{2}{5}$$

$$d) \frac{17}{20} \div \frac{1}{6}$$



REVIEW

What are the steps to dividing fractions?

What is an unknown in math?

What can we use to depict an unknown?



VARIABLES

Whenever we do not know a value in math we depict the unknown value with a variable.

Variables can be any letter, but the most commonly used variable is 'x'.