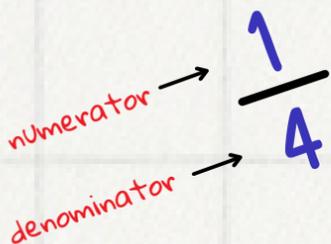
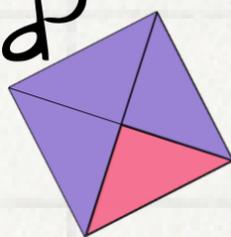


Adding and Subtracting fractions and mixed numbers!



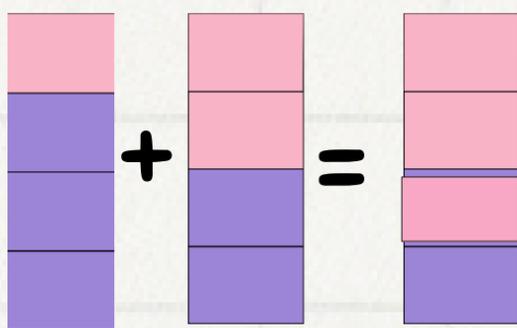
Adding and Subtracting Fractions

- To add or subtract fractions accurately the fractions must have a common denominator.
- A common denominator is a number that is a multiple of each of the given denominators. for example 12 is a common multiple for these fractions: 1/3; 2/4 and 7/12.
- Use the steps for making equivalent fractions, that have the same denominator.
- Once the denominators are the same, add/subtract the numerators (to get the total parts) and write the result as your numerator in the answer. The denominator does not change.

Add to find the sum:

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

Tip: Do not add or subtract the denominator - remember it represents how many parts make one whole.



Subtract to find the difference:

$$\frac{4}{5} - \frac{1}{3} =$$

Remember to rewrite with common denominator before adding/subtracting..

[multiply top and bottom by 3 to make the denominator 15 - the common multiple of 5 and 3]

$$[4 \times 3 = 12]$$

$$[5 \times 3 = 15]$$

[multiply top and bottom by 5 to make the denominator 15 - the common multiple of 5 and 3]

$$[1 \times 5 = 5]$$

$$[3 \times 5 = 15]$$

$$\frac{12}{15} - \frac{5}{15} = \frac{7}{15}$$

What is the smallest common multiple of five and three?



Mixed Numbers - Add to find the sum:

$$2\frac{4}{6} + 1\frac{1}{3} \xrightarrow{[\text{make equivalent fractions/ common denominator}]} [\begin{smallmatrix} 4 \div 2 \\ 6 \div 2 \end{smallmatrix}] 2\frac{2}{3} + 1\frac{1}{3}$$

[next add the whole numbers; and separately add the fractions to find your total]

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

Mixed Numbers - Subtract to find the difference:

$$3\frac{3}{4} - 1\frac{1}{3} \xrightarrow{[\text{make equivalent fractions/ common denominator}]} 3\frac{9}{12} - 1\frac{4}{12} =$$

[next subtract the whole numbers; and separately subtract the fractions to find the total]

$$3\frac{9}{12} - 1\frac{4}{12} = 2\frac{5}{12}$$