
RABINDRANATH WORLD SCHOOL
GURGAON
विवेक और ज्ञान
12x5
x+y

CLASS 7
CHAPTER-2
Fractions and Decimals

Fractions

- Fractions tell about **“a part of a whole”**.
- **The General form of a Fraction**
  Fraction = Numerator/Denominator
- Where, denominator ≠ 0. If numerator = denominator then the fraction becomes a whole i.e. 1. This is called unity of fraction.

Types Of Fractions

- **Proper fractions** represent a part of a whole. The numerator is smaller than the denominator. Proper fractions are greater than 0 and less than 1.Example: 1/4,7/9.

- **Improper fractions** have a numerator that is greater than or equal to the denominator. Example : 9/6,6/5. Improper fractions are greater than 1 or equal to 1.

- **Mixed fractions** are a combination of a whole number and a proper fraction.

- **Like fractions** : Fractions with the same denominator are called like fractions. Example : 5/7,3/7. Here we can compare them as 5/7>3/7

- **Unlike fractions**: Fractions with different denominators are called unlike fractions. Example : 5/3,9/2.

Fraction as an Operator ‘Of’

The‘of’operator basically implies multiplication

Example :16 of 18=16×18=288

Multiplication of Fractions

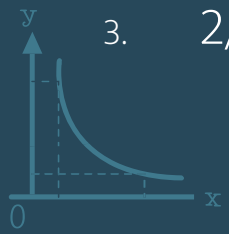
Examples

1. $7 \times 1/3 = 7 \times 1/3 = 7/3$
2. $3/5 \times 12/13 = 3 \times 12/5 \times 13 = 36/65$

Division of Fractions

Examples

1. $63 \div 7/5 = 63 \times 5/7 = 9 \times 5 = 45$
2. $8/11 \div 4 = 8/11 \times 1/4 = 2/11$
3. $2/7 \div 5/21 = 2/7 \times 21/5 = 6/5$



Reciprocal of a Fraction

Reciprocal of any number ‘n’ is written as 1/n

Reciprocal of a fraction is obtained by interchanging the numerator and denominator.

Example : Reciprocal of 2/5 is 5/2

Decimals

- **Integral part** (before the decimal point)
- **Fractional Part** (after the decimal point). These both are separated by a **decimal separator(.)** called the **decimal point**.
- A decimal number is written as follows : Example 564.8 or 23.97.

Types Of Decimals

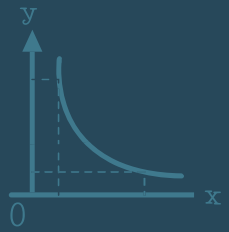
2+2=4

- Like Decimals – Decimals having the same number of digits on the right of the decimal point. Example-5.45 , 17.04 these decimal numbers are written up to 2 places of decimal.

x

y

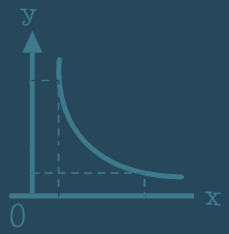
- Unlike Decimal – Decimals not having the same number of digits on the right of the decimal point. Example-7.5 has one decimal place , 23.16 has two decimal places.



Multiplication of decimals with powers of 10

- If a decimal is multiplied by a power of 10, then the **decimal point shifts** to the right by the **number of zeros in its power.**

- E.g : 45.678×10=456.78(decimal point shifts by 1 place to the right) or, 45.678×1000=45678 (decimal point shifts by 3 places to the right)



Math is fun!

THANKYOU

2+2=4

$\sqrt[n]{x}$

x/2y