

# MATHEMATICS

Class - III Dt. 27.04.23

## ROMAN NUMBERS →

- ⇒ Roman numerals are a numeral system that originated in ancient Rome.
- ⇒ Ancient Romans used a special method of showing numbers.
- ⇒ The Roman system did not use zero.
- ⇒ The Roman system used 7 letters to write numbers.

We use digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 to write numbers. This is called the Hindu-Arabic (Indian Numeral) system.

Roman Numbers:-	I	V	X	L	C	D	M
Values	1	5	10	50	100	500	1000

## Numbers from 1 to 39 (Pg no. 19)

The letters I, V and X are used in between 1 to 39.

Roman Numbers	I	II	III	IV	V	VI	VII	VIII	IX	X
Values	1	2	3	4	5	6	7	8	9	10

Rule-1: I and X can be repeated 3 times.

$$I = 1$$

$$X = 10 = 10$$

$$II = 1 + 1 = 2$$

$$XX = 10 + 10 = 20$$

$$III = 1 + 1 + 1 = 3$$

$$XXX = 10 + 10 + 10 = 30$$

Repetition means addition.

Rule-2: I to the left of V or X means subtraction. V can not be repeated.

$$IV = 5 - 1 = 4 \\ (V - I)$$

$$IX = 10 - 1 = 9 \\ (X - I)$$

Rule-3: I to the right of V or X means addition.

$$VI = 5 + 1 = 6 \\ (V + I)$$

$$VII = 5 + 1 + 1 = 7 \\ (V + I + I)$$

$$\text{VIII} = 5 + 1 + 1 + 1 = 8 \\ (\text{V} + \text{I} + \text{I} + \text{I})$$

$$\text{XI} = 10 + 1 = 11 \\ (\text{X} + \text{I})$$

Rule-4: To write numbers greater than 10, they are expanded into tens and ones.

$$11 = 10 + 1 = \text{XI}$$

$$19 = 10 + 9 = \text{XIX}$$

$$12 = 10 + 2 = \text{XII}$$

$$23 = 20 + 3 = \text{XXIII}$$

$$14 = 10 + 4 = \text{XIV}$$

$$27 = 20 + 7 = \text{XXVII}$$

## WORKSHEET

A. Write the Roman numbers for the Hindu-Arabic numbers

$$1. 7 = \text{VII}$$

$$2. 16 = 10 + 6 \\ = \text{XVI}$$

$$3. 30 = 10 + 10 + 10 \\ = \text{XXX}$$

$$4. 24 = 20 + 4 \\ = \text{XXIV}$$

$$5. 29 = 20 + 9 \\ = \text{XXIX}$$

$$6. 35 = 10 + 10 + 10 \\ + 5 = \text{XXXV}$$

B. Write the Hindu-Arabic numbers for the Roman numbers.

$$\textcircled{1} \text{VI} = 5 + 1 = 6$$

$$\textcircled{2} \text{II} = 1 + 1 = 2$$

$$\textcircled{3} \text{XVI} = 10 + 5 + 1 \\ = 16$$

$$\textcircled{4} \text{XIX} = 10 + 9 \\ = 19$$

$$\textcircled{5} \text{XXIII} = 10 + 10 + 3 \\ = 23$$

$$\textcircled{6} \text{XXV} = 10 + 10 + 5 \\ = 25$$

$$\textcircled{7} \text{XXXI} = 10 + 10 + 10 + 1 \\ = 31$$

$$\textcircled{8} \text{XXXIV} = 10 + 10 + 10 + 4 \\ = 34$$

$$\textcircled{9} \text{XXXVII} = 10 + 10 + 10 + 5 + 2 \\ = 37$$

H.W.

→ Learn the discussion properly.

→ Do Exercise-1.6 in copy.

→ Write the roman numbers for Hindu Arabic numbers from 1 to 39.