

3. Roman Numerals

We use numerals to write numbers. Usually, we use the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9. But sometimes we use Roman numerals like I and V. You might have seen these on clock faces or on the sign outside a classroom. The Romans used seven letters as numerals. These numerals and their values are given below.



Roman numeral	I	V	X	L	C	D	M
Value	1	5	10	50	100	500	1000

To form numbers with these numerals, you have to follow certain rules.

- To form larger numbers, I, X, C and M can be repeated up to three times. The number formed is their sum.

$$\begin{aligned} \text{II} &= 1 + 1 = 2 & \text{III} &= 1 + 1 + 1 = 3 & \text{XX} &= 10 + 10 = 20 \\ \text{CC} &= 100 + 100 = 200 \end{aligned}$$



- A smaller numeral gets added to the greater numeral on its left.

$$\begin{aligned} \text{VI} &= 5 + 1 = 6 & \text{VII} &= 5 + 1 + 1 = 7 & \text{VIII} &= 5 + 1 + 1 + 1 = 8 \\ \text{XI} &= 10 + 1 = 11 & \text{XV} &= 10 + 5 = 15 & \text{XXII} &= 10 + 10 + 1 + 1 = 22 \end{aligned}$$

- A smaller numeral gets subtracted from the greater numeral on its right.

$$\text{IV} = 5 - 1 = 4 \quad \text{IX} = 10 - 1 = 9 \quad \text{XL} = 50 - 10 = 40$$



- A smaller numeral between two greater numerals gets subtracted from the numeral on its right.

$$\text{XIV} = 10 + 5 - 1 = 14 \quad \text{XIX} = 10 + 10 - 1 = 19$$

See how these rules are used in writing 1 to 20.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX



Exercise 3A

1. Write the numbers shown by the Roman numerals.

(a)	I	V	X	L	C	D	M

(b)	II	III	XX	XXX	CC	CCC

(c)	IV	IX	XIV	XIX	XXIV	XXIX

(d)	VI	VII	VIII	XI	XII	XIII	XVI	XXI	XXV

2. Write using Roman numerals.

(a)	3	4	1	2	9	10	11	15	13	16

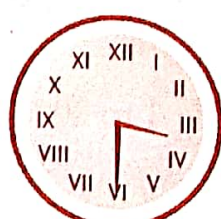
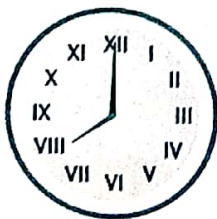
(b)	7	5	8	14	18	19	12	6	17	20

3. Write 1 to 20 using Roman numerals.

4. Write the time.



2:00



24

