



**THE LAIDLAW MEMORIAL SCHOOL AND JUNIOR COLLEGE,
KETTI
ENTRANCE EXAMINATION
SUBJECT: MATHEMATICS**

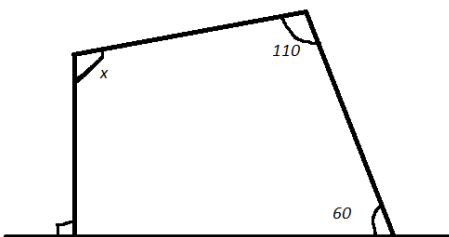
CLASS	: IX	DATE	: / /2022
READING TIME	: 5 Mins	TOTAL MARKS	: 25
WRITING TIME	: 1 HOUR	NO. OF PAGES	: 02

I Answer the following: **10 X 1 = 10**

- 1) Additive inverse of $-(-2)$ is _____
- 2) Find the multiplicative inverse of $2/3$
- 3) Simplify: $[(2)^{-1} + (4)^{-1} + (3)^{-1}]^{-1}$
- 4) Without adding, find the sum of: $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19$.
- 5) Find the square root of 4489
- 6) Is 729 a perfect cube?
- 7) If $A = \{3, 6, 9, 12, 15, 18, 21, 24\}$, $B = \{0, 4, 8, 12, 16, 20, 24\}$, then find $A \cap B$.
- 8) Find the value of 35% of ₹300.
- 9) Compound interest of ₹1000 at 10% p.a. for 2 years is _____
- 10) If 8 meters cloth costs ₹250, find the cost of 5 meters of the same cloth.

II Answer the following: **5 X 2 = 10**

- 1) Add: $4x^3 - 7x^2 + 9$, $3x^2 - 5x + 4$, $7x^3 - 11x + 1$, $6x^2 - 13x$.
- 2) Factorise: $5xy + 7y - 5y^2 - 7x$.
- 3) Solve: $7x - 8 = 5x + 2$.
- 4) Find the angle measure x in the following diagram:

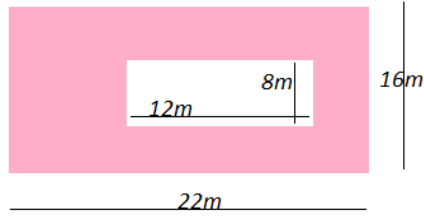


- 5) Two adjacent sides of a parallelogram are 24cm and 18 cm. If the distance between longer sides is 12 cm, find the distance between shorter sides.

III Answer any two of the following:

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

- 1) Find six rational numbers between 3 and 4
- 2) Find the area of the shaded region:



- 3) Three more than twice a number is equal to four less than the number. Find the number.