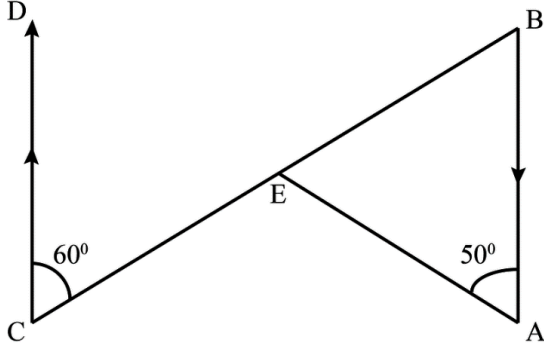
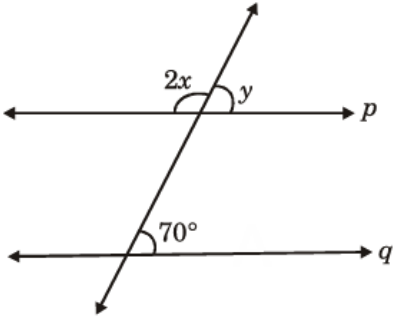


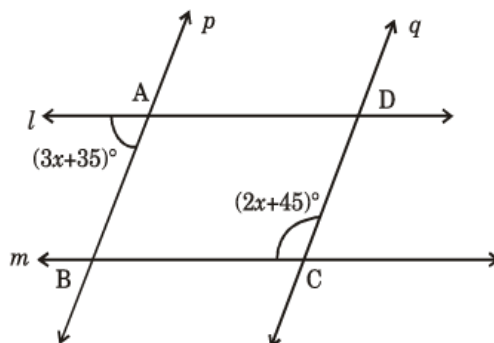
SAMPLE PAPER CLASS-VIII		
TERM – I (2026-27)		
SUBJECT: MATHEMATICS		
TIME: 3 hours		MAX. MARKS: 80
General Instructions: 1 Reading time for this question paper is 15 minutes. 2 This question paper consists of 7 pages. 3 This Question Paper has 5 Sections A, B, C, D and E. 4 Section A has 20 MCQs carrying 1 mark each. 5 Section B has 5 questions carrying 02 marks each. 6 Section C has 6 questions carrying 03 marks each. 7 Section D has 4 questions carrying 05 marks each. 8 Section E has 3 case based integrated units of assessment (04 marks each) with sub- parts of the values of 1, 1 and 2 marks each respectively. 9 All Questions are compulsory. However, an internal choice in 2 Questions of 5 marks, 2 Questions of 3 marks and 2 Questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section E. 10 Draw neat figures wherever required.		
Section A		
1.	If the floor of a rectangular hall has a perimeter 250 m and height of hall is 6 m then area of four walls is- (A) 1800m^2 (B) 1500m^2 (C) 1000m^2 (D) 2400m^2	(1)
2.	If it takes 40 days for 120 men to complete a work, how long will it take for 80 men to complete the same work? (A) 50 days (B) 60 days (C) 80 days (D) 100 days	(1)
3.	The value of $\sqrt[3]{1.331} \times \sqrt[3]{0.001331}$ is- (A) 121 (B) 0.1331 (C) 0.121 (D) 1331	(1)
4.	The marked price of a pen is ₹10 and the shopkeeper allows a discount of 10% on it. The sale price is- (A) ₹8 (B) ₹9 (C) ₹10 (D) ₹11	(1)
5.	The value of $\sqrt[3]{10^3 + 9^3 - 1^3}$ is- (A) 12 (B) 9 (C) 24 (D) 18	(1)
6.	Which of the following is a triangular number as well as a square number? (A) 25 (B) 36 (C) 48 (D) 49	(1)
7.	A right circular cylinder is 25cm high and the circumference of its base is 22cm. The curved surface area of the cylinder is- (A) 500 cm^2 (B) 505 cm^2 (C) 550 cm^2 (D) 450 cm^2	(1)
8.	Which of the following is not true?	(1)

	(A) $(a + b)^2 = a^2 + 2ab + b^2$ (C) $(a + b)(a - b) = a^2 - b^2$ (B) $(a - b)^2 = a^2 - 2ab + b^2$ (D) $(x + a)(x + b) = x^2 - (a - b)x + ab$	
9.	Factorised form of $x^2 + x - 6$ is- (A) $(x + 2)(x - 3)$ (C) $(x + 2)(x + 3)$ (B) $(x - 2)(x - 3)$ (D) $(x - 2)(x + 3)$	(1)
10.	In the given figure if $AB \parallel CD$, then the value of $\angle ABE$ is-  (A) 50° (B) 60° (C) 70° (D) 20°	(1)
11.	If the selling price of a book is thrice the cost price, then profit % is- (A) 50% (B) 100% (C) 200% (D) 250%	(1)
12.	The value of $\sqrt{17^2 - 15^2}$ is- (A) 2 (B) 4 (C) 8 (D) 16	(1)
13.	The coordinates of the point where x-axis and y-axis meet are- (A) (2, 0) (B) (0, 3) (C) (0, 0) (D) (-1, 0)	(1)
14.	Which of the following is not a perfect square? (A) 225 (B) 243 (C) 256 (D) 289	(1)
15.	In the given figure if $p \parallel q$, then the value of $(x + y)$ is-  (A) 55 (B) 70 (C) 125 (D) 180	(1)
16.	If x and y vary inversely and $y = 45$, then find x if constant of variation is 9: (A) 5 (B) $\frac{1}{5}$ (C) 405 (D) 9	(1)
17.	If a number is doubled then which of the following is a correct statement? (A) Its cube is two times the cube of the given number. (B) Its cube is three times the cube of the given number.	(1)

	(C) Its cube is six times the cube of the given number. (D) Its cube is eight times the cube of the given number.	
18.	The perpendicular distance of the point P (3, 4) from the x-axis is- (A) 3 units (B) 4 units (C) 7 units (D) 1 unit	(1)
19.	DIRECTIONS: In question number 19 and 20, a statement of assertion (A) is followed by a statement of reason (R). Choose the correct option. (A) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A). (B) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A). (C) Assertion (A) is true but reason (R) is false. (D) Assertion (A) is false but reason (R) is true. Assertion(A): If the length of the side of a cube is doubled, then the ratio of volumes of new cube and the original cube is 8:1. Reason(R): The volume of a cube is (side) ³ .	(1)
20.	Assertion(A): The number of non- perfect square numbers between 500^2 and 501^2 is 1000. Reason(R): The number of non- perfect square numbers between n^2 and $(n+1)^2$ is $2n$.	(1)
Section B		
21.	If the cost price of 18 mangoes is the same as the selling price of 16 mangoes, find the gain percent. OR A person sells an article for ₹550, gaining one-tenth of its C.P. Find gain percent.	(2)
22.	Factorise: $16a^2b - 64b^3$	(2)
23.	Find the smallest number by which 345600 must be divided to obtain a perfect cube.	(2)
24.	Find the value of: $\sqrt[3]{\frac{-1024}{686}}$ OR If $\sqrt[3]{-343} + x = \sqrt[3]{0.008}$, then find the value of x .	(2)
25.		(2)

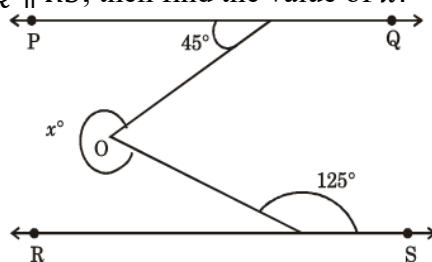
Section C

26. If $p \parallel q$ and $l \parallel m$, find the value of x : (3)



OR

In the given figure, if $PQ \parallel RS$, then find the value of x :



27. A cylindrical well is 21m deep. Its inner diameter is 14 m respectively. Find the cost of renovating the inner curved surface at the rate of ₹25 per m^2 . (3)
28. If one member of the Pythagorean triplet is 8, then find the triplet. (3)
29. A train is 450 m long running at a speed of 45 km/hr. How much time will it take to cross a 175m long bridge? (3)
- OR**
- A garrison of 120 men has provision for 30 days. At the end of 5 days, five more men joined them. How many days can they sustain on the remaining provision?
30. The walls and ceiling of a hall $20\text{ m} \times 16\text{ m} \times 10\text{ m}$ are to be painted. From each container of paint, 130 m^2 of area is painted. How many containers of paint are required to paint the walls and ceiling of the hall? (3)
31. Factorise $4y^2 - 12xy + 9x^2 - 4z^2$ using suitable identity. (3)

Section D

32. Two parallel sides DC and AB of a trapezium are 12cm and 36 cm respectively. If non-parallel sides are each equal to 15 cm, find the area of trapezium. (5)
- OR**
- An iron pipe is 21m long and its exterior diameter is 8cm. if the thickness of the pipe is 1 cm and iron weight is 8 g/cm^3 , find the weight of pipe.
33. Find the least number of six digits which is a perfect square. Also find the square root of the number so obtained. (5)
- OR**
- Find the square root of 5 correct upto 3 decimal places and hence evaluate $\sqrt{\frac{125}{9}}$
34. The following table shows the cost of apples in the supermarket. Draw the graph to show this information. (5)
- | | | | | | |
|-----------------------|-----|-----|-----|-----|-----|
| Apples (in Kg) | 2 | 3 | 5 | 7 | 9 |
| Cost (in ₹) | 100 | 150 | 250 | 350 | 450 |
- From the graph, answer the following questions
(a) What will be the cost of 6 kg of Apples?

