



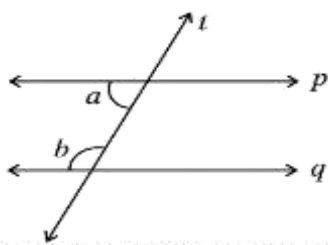
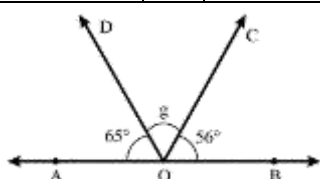
Indian School Al Wadi Al Kabir
Mid Term Examination (2026-27)

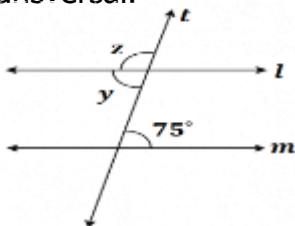
Class: VII
Date: 24/09/2026

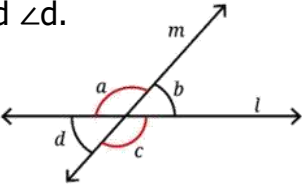
MATHEMATICS
SET – 1 ANSWER KEY

Max. Marks: 80
Time: 2 ½ Hour.

SECTION A Multiple Choice Question (Q.1 to Q.15)										
1.	The decimal form of "5 hundreds, 3 tens, and 7 hundredths" is:									1M
	A		B	530.07	C		D			
2.	A farmer has 81 metres of fencing wire. He used $\frac{7}{9}$ of the wire to fence a vegetable garden. Length of fencing wire he used is:									1M
	A		B		C	63 metres	D			
3.	Which of the following expressions is equal to $14 - (9 - 3)$?									1M
	A		B	$14 - 9 + 3$	C		D			
4.	The algebraic expression represents the statement: "9 subtracted from six times a number p" is:									1M
	A		B		C	$6p - 9$	D			
5.	The possible number of digits in the product when a five-digit number is multiplied by a three-digit number is:									1M
	A		B	7 or 8 digits	C		D			
6.	The next term in the given sequence of fractions is: $2\frac{3}{10}, 2\frac{7}{10}, 3\frac{1}{10}, \text{---}$									1M
	A		B		C		D	$3\frac{5}{10}$		
7.	A cyclist completes $\frac{5}{8}$ of a track before taking a break. The reciprocal of $\frac{5}{8}$ is:									1M
	A		B		C	$\frac{8}{5}$	D			
8.	A company in India earned ₹48 crore from its sales in one year. For its international report, the amount was converted into the International Numbering System. The equivalent of ₹48 crore in the International System is:									1M
	A	480 million	B		C		D			
9.	Name the property used in the expression: $(16 + 24) + 30 = 16 + (24 + 30)$									1M
	A		B		C		D	Associative property		
10.	Which of the following is an algebraic expression?									1M
	A		B	$3k - 8$	C		D			

11.	In the given figure, the lines $p \parallel q$ and t is the transversal. Then the value of $a + b$ is:					1M		
								
	A		B		C	D	180°	
12.	The numeral represents Twenty-five million, three hundred forty thousand, twelve is:					1M		
	A		B	25,340,012	C		D	
13.	Which pair consists of like terms?					1M		
	A	$5p, 8p$	B		C		D	
14.	In the given figure $\angle AOD = 65^\circ$ and $\angle BOC = 56^\circ$. The value of angle g is:					1M		
								
	A	59°	B		C		D	
15.	During a school art competition, Sara completed $\frac{4}{5}$ of her painting before the break. The decimal representing the part of the painting she completed is:					1M		
	A		B		C		D	0.8
16.	Section B: Source based question(Q16) - 5 Marks							
	A school organised a Charity Carnival to raise money for children in need. Students set up different stalls selling different items. The Book Stall sold $(2x+5)$ books on the first day and $(3x-2)$ books on the second day. The Art Stall sold $(x+7)$ paintings. Each book was sold for ₹20, while each painting was sold for ₹50. The school also received a donation of ₹ $(4x+3y+25)$. From the total collection, ₹ $(2x+y+15)$ was spent on arranging the carnival. Based on the information, answer the following questions.							
I	Find the algebraic expression for the total number of books sold on both days.					1M		
	A	$5x + 3$	B		C		D	
II	Find the total number of books and paintings sold.					1M		
	A		B		C		D	$6x + 10$
III	Each painting costs ₹50. Find the amount received from selling $(x + 7)$ paintings.					1M		
	A		B	₹ $50(x+7)$	C		D	
IV	The total collection from the charity event is represented by ₹ $(8x+4y+50)$ and the amount spent for the event is represented by ₹ $(2x+y+15)$. Find the expression representing the remaining amount.					1M		
	A		B		C	$6x+3y+35$	D	
V	The school received a donation of ₹ $(4x + 3y + 25)$ for charity to support its students. If $x = 20$ and $y = 15$, how much money did the school receive as a donation?					1M		
	A		B	₹150	C		D	
	Section B: Short Answer Questions (Q17 to Q21)-2 marks each							
17.	Observe the pattern and complete the missing numbers:					2M		

	$* 12 \times 9 = 108$ $* 23 \times 9 = 207$ $* 34 \times 9 = 306$ $* 45 \times 9 = \underline{405}$ $* 56 \times 9 = \underline{504}$	
18.	A pathway has 7 lamp posts placed in a straight line. The distance between adjacent lamp posts is $\frac{13}{6}$ metre. Find the distance from the first lamp post to the last lamp post. Ans: Number of lamp posts = 7 Number of gaps between them = $7-1=6$ Distance between adjacent lamp posts = $\frac{13}{6}$ Total distance = $\frac{13}{6} \times 6 = 13$ metres	2M
19.	Use '>' or '<' or '=' in the following expressions to compare them. (Show working) $64 - (21+9)$ $64 + (-21- 9)$ Ans: LHS: $64 - (21+9) = 64 - 30 = 34$ RHS: $64 + (-21- 9) = 64 + -30 = 34$ $64 - (21+9) = 64 + (-21- 9)$	$\frac{1}{2}$ $\frac{1}{2}$ 1
20.	In the given figure lines $l \parallel m$ and t is the transversal. Find the value of y and z. Ans: $y = 75^\circ$ (alternate interior angles) $z = 180 - 75 = 105^\circ$ (linear pair) 	1 1
21.	During a school science and technology exhibition, two drones are tested to see how accurately they can maintain different flying heights. Drone A is flying at a height of 67.45 m above the ground, while Drone B is flying at a height of 67.405 m. Which drone is flying higher and by how much? Ans: Drone A = 67.450 m and Drone B = 67.405 m $67.450 > 67.405$ Difference: $67.450 - 67.405 = 0.045$ m Drone A is flying higher by 0.045 m	$\frac{1}{2}$ 1 $\frac{1}{2}$
	Section C: Long Answer Questions (Type – 1) of 3 marks each (Q.22 to Q.27)	
22.	Simplify the expression: $2(5m + 3n) - 4m - 7n - 6$ Ans: $2(5m + 3n) - 4m - 7n - 6$ $= 10m + 6n - 4m - 7n - 6$	1

	$= 10m - 4m + 6n - 7n - 6$ $= 6m - n - 6$	1 1
23.	In the adjoining figure, if $\angle a = 115^\circ$, find $\angle b$, $\angle c$ and $\angle d$. Ans: $c = 115^\circ$ (vertically opposite angles) $b = 180 - 115 = 65^\circ$ (linear pair) $d = 65^\circ$ (vertically opposite angles) 	1 1 1
24.	Evaluate 104×16 using the distributive property. Ans: $104 \times 16 = (100 + 4) \times 16$ $= 100 \times 16 + 4 \times 16$ $= 1600 + 64$ $= 1664$	1 $\frac{1}{2}$ 1 $\frac{1}{2}$
25.	a) Multiply: $3\frac{2}{7} \times \frac{7}{24}$ b) Divide: $\frac{5}{13} \div \frac{10}{9}$ Ans: a) $3\frac{2}{7} \times \frac{7}{24} = \frac{23}{7} \times \frac{7}{24} = \frac{23}{24}$ b) $\frac{5}{13} \div \frac{10}{9} = \frac{5}{13} \times \frac{9}{10} = \frac{1}{13} \times \frac{9}{2} = \frac{9}{26}$	$1\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$
26.	Municipal elections were held in four regional districts. District A had 3,15,892 registered voters, District B had 3,15,489 registered voters, District C had 3,15,928 registered voters, and District D had 3,15,198 registered voters. a) Which district had more registered voters? b) Round District B's voter count to the nearest thousand. c) Arrange the four districts in descending order based on their registered voter counts. Ans: a) District C had the most registered voters, with 3,15,928 voters b) District B's voter count rounded to the nearest thousand = 3,15,000 c) District C (3,15,928) > District A (3,15,892) > District B (3,15,489) > District D (3,15,198)	1 1 1
27.	Find the sum and difference as directed: a) $\frac{4}{10} + \frac{9}{100}$ b) $17\frac{6}{100} - 4\frac{3}{100}$ Ans: a) $\frac{4}{10} + \frac{9}{100} = \frac{40}{100} + \frac{9}{100} = \frac{49}{100}$ b) $17\frac{6}{100} - 4\frac{3}{100} = \frac{1706}{100} - \frac{403}{100} = \frac{1303}{100}$	$\frac{1}{2}$ 1 $\frac{1}{2}$

Section D: Long Answer Questions (Type – 2) (Q.28 to Q.33)

& Case study (Q.34 &35) of 4 marks each

- 28.** Neha visits a flower shop to decorate her home. The shopkeeper tells her that the cost of one flower is ₹ p , the cost of one pot is ₹ q , and the cost of one packet of seeds is ₹ r . Neha decides to buy 7 flowers, 2 pots, and 3 packets of seeds.

a) Write the expression for the total cost of 7 flowers, 2 pots and 3 packets of seeds?

b) If $p=₹20$, $q=₹50$, and $r=₹30$, find the total amount spent by Neha.

Ans:

a) Cost of 7 flowers = $7p$

Cost of 2 pots = $2q$

Cost of 3 packet of seeds = $3r$

Total cost = $7p + 2q + 3r$

b) Total amount = $7 \times 20 + 2 \times 50 + 3 \times 30$

$= 140 + 100 + 90 = ₹330$

$\frac{1}{2}$
 $\frac{1}{2}$
 $\frac{1}{2}$
 $\frac{1}{2}$
1
1

- 29.** Write each quantity in decimal form and represent it in a place value chart.

a) 2 hundreds and 3 hundredths

b) $\frac{8}{100}$ and $\frac{5}{10}$

Ans:

a) 2 hundreds and 3 hundredths = 200.03

b) $\frac{8}{100}$ and $\frac{5}{10} = 0.58$

Number	Hundreds	Tens	Ones	Decimal Point	Tenth	Hundredth
a) 2 hundreds and 3 hundredths	2	0	0	.	0	3
b) $\frac{8}{100}$ and $\frac{5}{10}$	0	0	0	.	5	8

1
1
1
1

- 30.** Find missing angles x , y , z and s from the given figure; if the lines $m \parallel n$ and $p \parallel q$

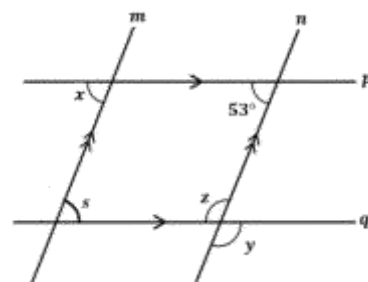
Ans: From the figure, $m \parallel n$ and $p \parallel q$

$x = 53^\circ$ (corresponding angles)

$s = 53^\circ$ (alternate interior angles)

$z = 180 - 53 = 127^\circ$ (co-interior angles)

$y = 127^\circ$ (vertically opposite to z)

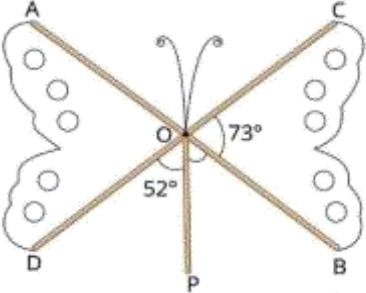


1
1
1
1

- 31.** A school has 720 sheets of coloured paper. Students use $\frac{1}{4}$ of the sheets for posters and $\frac{2}{9}$ for models for an exhibition.

1) How many sheets are used for posters?

	2) How many sheets are used for models? 3) How many sheets are left after making the posters and models? Ans: 1) Sheets used for posters = $\frac{1}{4} \times 720 = 180$ 2) Sheets used for models = $\frac{2}{9} \times 720 = 160$ 3) Number of sheets left = $720 - (180 + 160)$ $= 720 - 340 = 380$	1 1 1 1
32.	An amusement park charges ₹100 per adult and ₹60 per child for a roller coaster ride. a) A school trip has 5 teachers (adults) and 10 students (children). What is the total ticket cost? b) What is the cost for 2 groups of 3 children each? Ans: Cost for 5 teachers = $5 \times ₹100 = ₹500$ Cost for 10 children = $10 \times ₹60 = ₹600$ Total ticket cost = $₹500 + ₹600 = ₹1,100$ b) Cost of 1 group of 3 children = $3 \times ₹60 = ₹180$ Cost of 2 groups = $2 \times ₹180 = ₹360$	$\frac{1}{2}$ $\frac{1}{2}$ 1 1 1
33.	A national railway network recorded passenger bookings for a busy holiday season. Initially, 45,82,316 tickets were booked for express trains. Later, an additional 34,15,820 tickets were booked. Due to unexpected track maintenance and weather delays, 12,40,539 tickets were subsequently cancelled and refunded. (a) How many tickets were booked altogether before the cancellations? (b) How many valid tickets remained after the cancellations? (c) Round off the final number of valid tickets to the nearest lakh. Ans: No. of tickets booked initially = 45,82,316 No. of tickets booked additional = 34,15,820 Tickets booked altogether before cancellations: $45,82,316 + 34,15,820 = 79,98,136$ (b) No. of tickets cancelled = 12,40,539 Valid tickets remaining after cancellations = $79,98,136 - 12,40,539 = 67,57,597$ c) Rounding to the nearest lakh: $67,57,597 \approx 68,00,000$	$\frac{1}{2}$ $\frac{1}{2}$ 1 1 1

34. CASE STUDY-1	A school organizes a cycling challenge for students that tests a cyclist's endurance, distance, navigation, or skill rather than competing directly against other racers. On the first day, Aarav cycles 4.75 km, on the second day 6.25 km, and on the third day 3.8 km. Using this information answer the following questions: (a) Find the total distance Aarav cycled in the three days. (b) How much farther did Aarav cycle on the second day than on the third day? (c) Convert the total distance travelled in three days into metres. (d) Which day did Aarav cycle the greatest distance? Ans: a) Total distance cycled = $4.75 + 6.25 + 3.80 = 14.80$ km b) Difference between the second and third day = $6.25 - 3.80 = 2.45$ km c) The total distance into metres = $14.80 \text{ km} \times 1000 = 14,800$ m d) Aarav cycled the greatest distance on the second day — 6.25 km.	1 1 1 1
35. CASE STUDY-2	While crafting a colourful toy butterfly for her younger sister, Miya carefully arranged wooden sticks to build its frame. She laid down two primary sticks, AB and CD, crossing them precisely at point O to form the structure of the wings. To make the toy easy to hold, she attached a third stick, OP, extending downward from the centre point. From the design she noticed that $\angle BOC = 73^\circ$ and $\angle DOP = 52^\circ$. I) What is the value of $\angle AOD$. II) Write a pair of adjacent angles from the figure. III) What is the value of $\angle POB$? Ans: $\angle AOD = 73^\circ$ (vertically opposite angles) II) A pair of adjacent angles ($\angle AOC$, $\angle COB$) or ($\angle COB$, $\angle BOP$) or ($\angle BOP$, $\angle POD$) or ($\angle POD$, $\angle DOA$) or ($\angle DOA$, $\angle AOC$) III) $\angle POB = 180 - (52 + 73)$ $= 180 - 125 = 55^\circ$ (Angles in a straight line)	 1 1 1 1
