

CLASS 6

CBSE SAMPLE QUESTION PAPERS -- MATHEMATICS

HALF YEARLY EXAMINATION

Time: 3 hrs

Marks: 80

General Instructions:

- 1) Section A consists of 4 questions carrying 1 mark each.
- 2) Section B consists of 16 questions carrying 2 marks each.
- 3) Section C consists of 12 questions carrying 3 marks each.
- 4) Section D consists of 2 questions carrying 4 marks each.

Section A

1. How many milligrams make one gram?

(100, 1000, 10000)

2. Which of the following numbers is divisible by 9?

(1230, 2701, 7308)

3. A four-sided polygon is known as -----

(Triangle, Quadrilateral, Pentagon)

4. Where will the hand of a clock stop if it starts at 12 and makes $\frac{1}{2}$ of a revolution, clockwise?

(6, 5, 4)

Section B

5. Insert commas suitably and write the number name of the following number according to Indian and International system of numeration.

8657432

6. Write in Roman Numerals:

a) 548

b) 232

7. Find the product using suitable rearrangement.

$$2 \times 768 \times 50$$

8. A vendor supplies 32 litres of milk to a hotel in the morning and 68 litres of milk in the evening. If the milk costs Rs 45 per litre, how much money is due to the vendor per day?

9. Find the LCM of 12, 24 and 36.

10. Draw a 5 sided polygon and draw its diagonals?

11. Represent the following numbers on a number line.

a) +5

b) -8

12. Write all the integers between -5 and +5

13. Represent the following numbers as integers with appropriate sign.

a) A deposit of Rs 1000

b) Withdrawal of Rs 750

14. Draw a line AB and also mark a line segment PQ on it.

15. Name the types of the following triangles.

a) Triangle PQR such that $PQ = QR = PR$

b) Triangle XYZ with angle $Y = 90^\circ$ and $XY = YZ$.

16. Draw a rough sketch of a quadrilateral PQRS. State

a) two pairs of opposite angles

b) two pairs of opposite sides.

17. Draw a cuboid and write the number of vertices, edges and faces.

18. What is the measure of

a) a right angle?

b) a straight angle?

19. State true or false

a) $25 - 5 = 5 - 25$

b) $43 + 32 = 32 + 43$

20. Find the solution of

a) $(-40) + (+22)$

b) $(12) + (-21)$

Section C

21. Find the difference between the greatest and the least five digit numbers that can be written using the digits.

6, 0, 4, 5, 3 each only once.

22. Find using distributive property.

a) 738×103

b) 258×1008

23. Write the predecessor and successor of

a) 3456

b) 9999

c) 1000

24. Express the following as the sum of two odd primes

a) 44

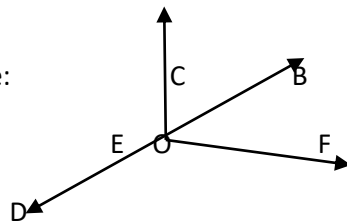
b) 16

25. Using divisibility tests, determine which of the following are divisible by 11.

a) 901153

b) 7138965

26. Use the figure to name:



a) Five points

b) A line

c) Four rays

d) Five line segments

27. Name the triangles according to its measurements.

a) Triangle with lengths of sides 7 cm, 8 cm and 9cm.

b) $\triangle PQR$ Such that $PQ = QR = PR = 5$ cm

c) $\triangle XYZ$ With angle = 90° and $XY = YZ$.

28. Find the sum of

a) $50 - (-40) - (-2)$

b) $(-7) + (-8) + (-90)$

29. The sum of two integers is 30. If one of the integers is -42, and then find the other?

30. a) Write four negative integers greater than -20

b) Write four integers less than -10

31. What fraction of a clockwise revolution does the hour hand of a clock turn through, when it goes from

a) 3 to 9

b) 4 to 7

c) 7 to 10

32. Draw a rough sketch of a quadrilateral PQRS. Draw its diagonals. Is the meeting point of the diagonals in the interior or exterior of the quadrilateral?

Section D

33. Draw any circle and mark

a) Its centre

b) a radius

c) a diameter

d) a sector

34. Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.

ANSWERS:

SECTION A

1. 1000 mg
2. 7308
3. Quadrilateral
4. 6

SECTION B

5. Indian System of numeration:

86, 57,432

Eighty six lakh fifty seven thousand four hundred and thirty two.

International System of numeration:

8,657,432

Eight Million six hundred fifty seven thousand four hundred and thirty two.

6. a) DXLVIII

b) CCXXXII

7. $(2 \times 50) \times 768 = 100 \times 768 = 76800$

8. The amount of milk supplied in the morning = 32 litres

The amount of milk supplied in the evening = 68 litres

Cost of 1 litre of milk = Rs 45

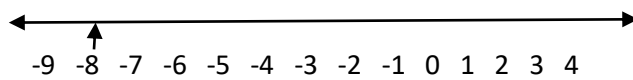
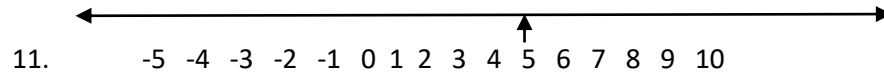
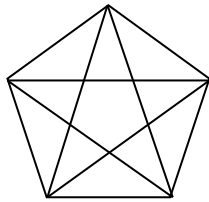
The amount of money which is due to the vendor = $45 (32 + 68) = 45 \times 100 = \text{Rs } 4500$

9.

2	12, 24, 36
2	6, 12, 18
2	3, 6, 9
3	3, 3, 9
3	1, 1, 3
1	1, 1, 1

$$\text{LCM} = 2 \times 2 \times 2 \times 3 \times 3 = 72$$

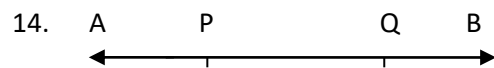
10.



12. -4, -3, -2, -1, 0, 1, 2, 3, 4

13. a) +1000

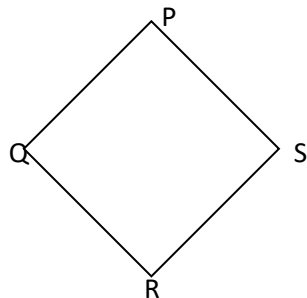
b) -750



15. a) Equilateral Triangle.

b) Right angled Isosceles Triangle.

16.



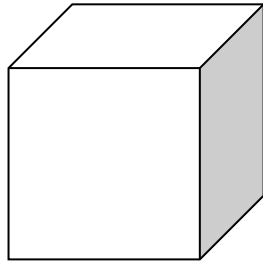
a) Angle PQR & Angle PSR

Angle QPS & Angle QRS.

b) PQ & SR

PS & QR

17.



Number of edges = 12

Number of vertices = 8

Number of faces = 6

18. a) 90°

b) 180°

19. a) False

b) True

20. a) $(-40) + 22 = -18$

b) $12 + (-21) = -9$

SECTION C

21. Greatest five digit number using the digits 6, 0, 4, 5 and 3 is 65430

Least five digit number = 30456

Difference = $65430 - 30456 = 34974$

22. a) $738 \times 103 = 738 \times (100 + 3) = 738 \times 100 + 738 \times 3 = 73800 + 2214 = 76014$

b) $258 \times 1008 = 258 \times (1000 + 8) = 258 \times 1000 + 258 \times 8 = 258000 + 2064 = 260064$

23.a)

Predecessor	Successor
a) 3455	3457
b) 9998	10000
c) 999	1001

24. a) $44 = 41 + 3$

b) $16 = 11 + 5$

25. a) Sum at odd places = $3 + 1 + 0 = 4$

Sum at even places = $5 + 1 + 9 = 15$

Difference = $15 - 4 = 11$, which is a multiple of 11.

So the given number is divisible by 11.

b) Sum at odd places = $5 + 9 + 3 + 7 = 24$

Sum at even places = $6 + 8 + 1 = 15$

Difference = $24 - 15 = 9$, which is not a multiple of 11.

So the given number is not divisible by 11.

26. a) O, C, B, E, F

b) DB

c) OC, OB, OF, OD

d) OE, OC, OB, OF

27. a) Scalene Triangle

b) Equilateral Triangle

c) Right angled Isosceles Triangle

28. a) $50 - (-40) - (-2) = 50 + 40 + 2 = 92$

b) $(-7) + (-8) + (-90) = -105$

29. Let the number be x.

Given $x + (-42) = 30$

$x = 30 - (-42) = 30 + 42 = 72$

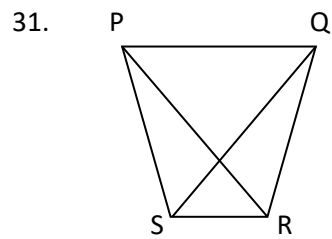
30. a) -19, -18, -17, -16

b) -11, -12, -13, -14

31. a) $\frac{1}{2}$

b) $\frac{1}{4}$

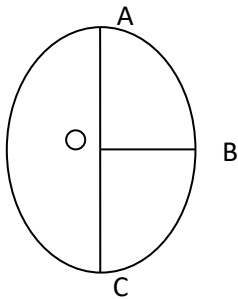
c) $\frac{1}{4}$



Meeting point is in the interior of a quadrilateral.

SECTION D

32.



a) Centre O

b) Radius OB

c) Diameter AC

d) Section AOB

33. Here first we have to find the LCM of these numbers.

2	6, 15, 18
3	3, 15, 9
3	1, 5, 3
5	1, 5, 1
	1, 1, 1

$$\text{LCM} = 2 \times 3 \times 3 \times 5 = 90$$

Therefore, the least number which when divided by 6, 15, 18 leave remainder 5 in each case

$$= 90 + 5 = 95$$

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