

CLASS NOTES

Class: VIII

Topic: PT-3 DRILL WORKSHEET 2– Ch-11

Subject: MATHEMATICS

OBJECTIVE PART:

Q1. Volume of a cube with an edge of 1.5 m

- (a) 23.75 m^3
- (b) 33.75 m^3
- (c) 3.375 m^3
- (d) 2.375 m^3

Q2. The surface area of a cube is 384 cm^2 . Its volume is

- (a) 521 cm^3
- (b) 125 cm^3
- (c) 512 cm^3
- (d) 152 cm^3

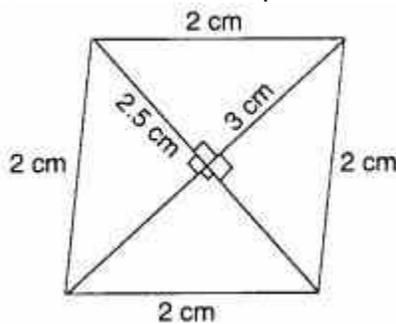
Q3. The total surface area of a cylinder of base radius r and height h is

- (a) $2\pi r (r + h)$
- (b) $\pi r (r + h)$
- (c) $2\pi rh$
- (d) $2\pi r^2$.

Q4. $1 \text{ m}^3 =$

- (a) 1 L
- (b) 10 L
- (c) 100 L
- (d) 1000 L.

Q5. The area of the quadrilateral is



- (a) 3.75 cm^2
- (b) 7.5 cm^2
- (c) 3 cm^2
- (d) 10 cm^2

Q6. The area of a rhombus is 60 cm^2 . One diagonal is 10 cm. The other diagonal is

- (a) 6 cm
- (b) 12 cm
- (c) 3 cm
- (d) 24 cm.

Q7. 8 persons can stay in a cubical room. Each person requires 27 m^3 of air. The side of the cube is

- (a) 6 m
- (b) 4 m
- (c) 3 m
- (d) 2 m.

Q8. A glass in the form of a right circular cylinder is half full of water. Its base radius is 3 cm and height is 8 cm. The volume of water is

- (a) $18\pi \text{ cm}^3$
- (b) $36\pi \text{ cm}^3$
- (c) $9\pi \text{ cm}^3$
- (d) 36 cm^3

Q9. The base radius and height of a right circular cylinder are 5 cm and 10 cm. Its total surface area is

- (a) $150\pi \text{ cm}^2$
- (b) $300\pi \text{ cm}^2$
- (c) 150 cm^2
- (d) 300 cm^2

Q10. The area of a trapezium is 480 cm^2 , the distance between two parallel sides is 15 cm and one of the parallel side is 20 cm. The other parallel side is:

- (a) 20 cm
- (b) 34 cm
- (c) 44 cm
- (d) 50 cm

Q11. The area of a rhombus is 240 cm^2 and one of the diagonals is 16 cm. Find the other diagonal.

- (a) 16 cm
- (b) 20 cm
- (c) 30 cm
- (d) 36 cm

Q12. If a cuboidal box has height, length and width as 20 cm, 15 cm and 10 cm respectively. Then its total surface area is:

- (a) 1100 cm^2
- (b) 1200 cm^2
- (c) 1300 cm^2
- (d) 1400 cm^2

Q13. The height of a cylinder whose radius is 7 cm and the total surface area is 968 cm^2 is:

- (a) 15 cm
- (b) 17 cm
- (c) 19 cm
- (d) 21 cm

Q14. The height of two right circular cylinders are the same. Their volume's are respectively $16 \pi \text{ m}^3$ and $81 \pi \text{ m}^3$. The ratio of their base radius is

- (a) 16 : 81
- (b) 9 : 14
- (c) 2 : 3
- (d) 4 : 9

Q15. If base area of a room is 30 m^2 and height is 3 m then its volume is

- (a) 900 m^3
- (b) 90 m^3
- (c) 33 m^3
- (d) 33 m^3

Q16. The base area of a right circular cylinder is $16 \pi \text{ cm}^2$. Its height is 5 cm. Its curved surface area is

- (a) $40 \pi \text{ cm}^2$
- (b) $30 \pi \text{ cm}^2$
- (c) $20 \pi \text{ cm}^2$
- (d) $10 \pi \text{ cm}^2$

Q17. The edge of a cube is 24 cm, cubes of side 8 cm be formed from this cube

- (a) 17 cubes

- (b) 27 cubes
- (c) 25 cubes
- (d) 8 cubes

Q18. Find the area of a triangle whose base is 4 cm and altitude is 6 cm.

- (a) 10 cm^2
- (b) 14 cm^2
- (c) 16 cm^2
- (d) 12 cm^2

Q19. The diagonal of a quadrilateral shaped field is 24 m and perpendicular dropped on it from the remaining opposite vertices are 6 m and 12 m. Find the area of the field.

- (a) 343 m^2
- (b) 125 m^2
- (c) 216 m^2
- (d) None of these

Q20. The quantity that a container holds is called its

- (a) surface area
- (b) lateral surface area
- (c) capacity
- (d) volume

Q21. If each edge of a cube is doubled, its surface area will increase

- (a) two times
- (b) three times
- (c) four times
- (d) five times

Q22. The area of a parallelogram with base (l) and height (h) is:

- A. $\frac{1}{2} lh$
- B. $2lh$
- C. lh
- D. $(lh)^2$

Q23. Surface area of cube of edge 'a' is:

A. $4a^2$

B. $6a^2$

C. $3a^2$

D. a^2

Q24. If the length and breadth of a rectangle are 15cm and 10cm, respectively, then its area is:

A. 100 sq.cm

B. 150 sq.cm

C. 115 sq.cm

D. 200 sq.cm

Q25. A cuboid has _____ pairs of identical faces.

A. 2

B. 3

C. 4

D. 5

Q26. The height of a cylinder whose radius is 7 cm and the total surface area is 968 cm^2 is:

A. 15 cm

B. 17 cm

C. 19 cm

D. 21 cm

Q27. Volume of a cylinder with base radius = r and height = h , is:

A. $2\pi rh$

B. $\pi r^2 h$

C. $2\pi r (r + h)$

D. $\frac{1}{3} \pi r^2 h$

Q28. Two identical cubes each of total surface area 24 cm^2 are joined end to end. Which of the following is the total surface area of the cuboid so formed?

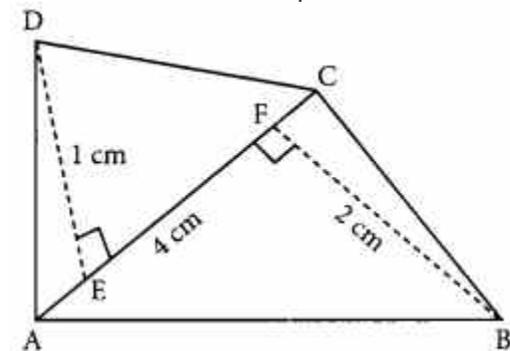
(a) 144 cm^2

(b) 40 cm^2

(c) 120 cm^2

(d) 118 cm^2

Q29. The area of the quadrilateral is



(a) 8 cm^2

- (b) 12 cm^2
- (c) 6 cm^2
- (d) 3 cm^2

Q30. The areas of a rectangle and a square are equal. If the length of the rectangle is 16 cm and breadth is 9 cm, find the side of the square.

- (a) 11 cm
- (b) 20 cm
- (c) 15 cm
- (d) 12 cm

Q31. If the diagonals of a rhombus are 12 cm and 5 cm, find the perimeter of the rhombus.

- (a) 13 cm
- (b) 26 cm
- (c) 25 cm
- (d) 62 cm

Q32. The volume of a box is 13400 cm^3 . The area of its base is 670 cm^2 . Find the height of the box.

- (a) 21 cm
- (b) 20 cm
- (c) 25 cm
- (d) 22 cm

Q33. How many bricks each 25 cm by 15 cm by 8 cm, are required for a wall 32 m long, 3 m high and 40 cm thick?

- (a) 12001
- (b) 20000
- (c) 12800
- (d) 18200

Q34. The area of a rectangle is 544 cm^2 . If its length is 32 cm, find its breadth.

- (a) 17 cm
- (b) 21 cm
- (c) 35 cm
- (d) 12 cm

Q35. The length and breadth of a rectangle are in the ratio 4 : 3. If its perimeter is 154 cm, find its length and breadth.

- (a) 11 cm and 22 cm
- (b) 20 cm and 25 cm
- (c) 44 cm and 33 cm
- (d) 12 cm and 18 cm

SUBJECTIVE PART:

Q1. The parallel sides of a trapezium are 40 cm and 20 cm. If its non-parallel sides are both equal, each being 26 cm, find the area of the trapezium.

Q2. Find the area of a rhombus whose one side measures 5 cm and one diagonal as 8 cm.

Q3. The diameter of a roller is 84 cm and its length is 120 cm. It takes 500 complete revolutions to move once over to level a playground. Find the area of the playground in m^2 .

Q4. Three metal cubes of sides 6 cm, 8 cm and 10 cm are melted and recast into a big cube. Find its total surface area.

Q5. A rectangular metal sheet of length 44 cm and breadth 11 cm is folded along its length to form a cylinder. Find its volume.

Q6. 160 m^3 of water is to be used to irrigate a rectangular field whose area is 800 m^2 . What will be the height of the water level in the field?

Q7. The cost of papering the wall of a room, 12 m long, at the rate of Rs. 1.35 per square meter is Rs. 340.20. The cost of matting the floor at Re. 0.85 per square metre is Rs. 91.80. Find the height of the room.

Q8. The perimeter of a trapezium is 52 cm. Its non-parallel sides are 10 cm each and the distance between two parallel sides is 8 cm. Find the area of the trapezium.

Q9. The length and breadth of a rectangle are 10 cm and 8 cm respectively. Find its perimeter if the length and breadth are (i) doubled (ii) halved.

Q10. A copper wire of length 44 cm is to be bent into a square and a circle. Which will have a larger area?

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NOTE: THE STUDENTS ARE ADVISED TO PRACTICE THIS WORKSHEET FOR THEIR UPCOMING PT3 EXAMS.

ASSIGNMENT: PRACTICE SUMS FROM R.S.AGRAWAL .

" CONTENT ABSOLUTELY PREPARED FROM HOME"