

Board –CBSE

Class –8th

Topic – Mensuration

- Q.1** One side of a rectangular field is 15 m and one of its diagonals is 17 m . Find the area of the field.
- Q.2** A lawn is in the form of a rectangle having its sides in the ratio $2:3$. the area of the lawn is $\frac{1}{6}$ hectares. Find the length and breadth of the lawn.
- Q.3** Find the cost of carpeting a room 13 m long and 9 m broad with a carpet 75 cm wide at the rate of Rs 12.40 per square metre.
- Q.4** If the diagonal of a rectangle is 17 cm long and its perimeter is 46 cm , find the area of the rectangle.
- Q.5** The length of a rectangle is twice its breadth. If its length is decreased by 5 cm and breadth is increased by 5 cm , the area of the rectangle is increased by 75sq. cm . Find the length of the rectangle.
- Q.6** In measuring the sides of a rectangle, one side is taken 5% in excess, and the other 4% in deficit. Find the error percent in the area calculated from these measurements.
- Q.7** A rectangular grassy plot 110 m by 65 m has a gravel path 2.5 m wide all round it on the inside. Find the cost of gravelling the path at 80 paise per sq. metre.
- Q.8** The perimeters of two squares are 40 cm and 32 cm . Find the perimeter of a third square whose area is equal to the difference of the areas of the two squares.
- Q.9** A room $5\text{ m}55\text{ cm}$ long and $3\text{ m}74\text{ cm}$ broad is to be paved with square tiles. Find the least number of square tiles required to cover the floor.
- Q.10** Find the area of a square, one of whose diagonals is 3.8 m long.
- Q.11** The diagonals of two squares are in the ratio of $2:5$. Find the ratio of their areas.
- Q.12** If each side of a square is increased by 25% , find the percentage change in its area.

- Q.13** If the length of a certain rectangle is decreased by 4 *cm* and the width is increased by
by
3 *cm*, a square with the same area as the original rectangle would result. Find the
perimeter of the original rectangle.
- Q.14** A room is half as long again as it is broad. The cost of carpeting the room at Rs 5 per
sq. *m* is 5 – 270 and the cost of papering the four walls at Rs 10 per m^2 is Rs1720. If
a door and 2 windows occupy 8 sq. *m*, find the dimensions of the room.
- Q.15** Find the area of a triangle whose sides measure 13 *cm*, 14 *cm* and 15 *cm*.
- Q.16** The length of a room is 5.5 *m* and width is 3.75 *m*. Find the cost of paving the floor
by
slabs at the rate of Rs 800 per sq. metre.
- Q.17** The length of a rectangle is 18 *cm* and its breadth is 10 *cm*. When the length is
increased to 25 *cm*, what will be the breadth of the rectangle if the area remains the
same?
- Q.18** A rectangular plot measuring 90 meters by 50 meters is to be enclosed by wire
fencing. If the poles of the fence are kept 5 metres apart, how many poles will be
needed?
- Q.19** A length of a rectangular plot is 60% more than its breadth. If the difference
between
the length and the breadth of that rectangle is 24 *cm*, what is the area of that
rectangle?
- Q.20** A rectangular parking space is marked out by painting three of its sides. If the length
of the unpainted side is 9 feet, and the sum of the lengths of the painted sides is 37
feet, then what is the area of the parking space in square feet?
- Q.21** The difference between the length and breadth of a rectangle is 23 *m*. If its
perimeter
is 206 *m* then find its area.
- Q.22** The length of a rectangular plot is 20 metres more than its breadth. If the cost of

fencing the plot @ Rs 26.50 per metre is Rs 5300, what is the length of the plot in meters?

- Q.23** The breadth of a rectangular field is 60% of its length. If the perimeter of the field is 800 *m*., what is the area of the field?
- Q.24** The ratio between the length and the perimeter of a rectangular plot is 1: 3. What is the ratio between the length and breadth of the plot?
- Q.25** The ratio between the length and the breadth of a rectangular park is 3: 2. If a man cycling along the boundary of the park at the speed of 12 *km/hr* completes one round in 8 minutes, then find the area of the park (in sq.).
- Q.26** The length of a rectangular hall is 5 *m* more than its breadth. The area of the hall is 750 *m*². Find the length of the hall.
- Q.27** The area of a rectangle is 460 square *m*. If the length is 15% more than the breadth, what is the breadth of the rectangular field?
- Q.28** A rectangular field is to be fenced on three sides leaving a side of 20 feet uncovered. If the area of the field is 680 sq. feet. How many feet of fencing will be required?
- Q.29** The ratio between the perimeter and the breadth of a rectangular is 5: 1. If the area of the rectangle is 216sq. *cm*, what is the length of the rectangle?
- Q.30** A farmer wishes to start a 100 sq. *m* rectangular vegetable garden. Since he has only 30 *m* barbed wire, he fences three sides of the garden letting his house compound wall act as the fourth side fencing. Find the dimension of the garden.

ANSWER

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| 1. $120 m^2$ | 2. $50 m$ | 3. 1934.4 | 4. $120 cm^2$ |
| 5. $20 cm$ | 6. 0.8% | 7. 680 | 8. $24 cm$ |
| 9. 176 | 10. $7.22 m^2$ | 11. 4:5 | 12. 56.25% |
| 13. $50 cm$ | 14. $L = 9, B = 6, H = 6$ | 15. $84 cm^2$ | 16. $J = 16,500$ |
| 17. $7.2 cm$ | 18. 56 | 19. 2560 sq. cm | 20. 126 |
| 21. $2520 m^2$ | 22. none of these | 23. 37500 sq. m | 24. 2 |
| 25. 153600 | 26. $30 m$ | 27. None of these | 28. 88 |
| 29. $18 cm$ | 30. $20 m \times 5 m$ | | |