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with square tiles. What will be the least number of square tiles required to cover the floor?

- A. 176176
B. 124124
C. 224224
D. 186186

15. The length of a rectangular plot is 2020 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 metres?

- A. 6060 m
B. 100100 m
C. 7575 m
D. 5050 m

16. The ratio between the length and the breadth of a rectangular park is 3:23:2. If a man cycling along the boundary of the park at the speed of 12 km/hr completes one round in 88 minutes, then what is the area of the park (in sq. m)?

- A. 142000
B. 112800
C. 142500
D. 153600

17. What is the percentage increase in the area of a rectangle, if each of its sides is increased by 20%?

- A. 45%
B. 44%
C. 40%
D. 42%

18. If the difference between the length and breadth of a rectangle is 23 m and its perimeter is 206 m, what is its area?

- A. 2800 m²
B. 2740 m²
C. 2520 m²
D. 2200 m²

19. The ratio between the perimeter and the breadth of a rectangle is 5:1:1. If the area of the rectangle is 216 sq. cm, what is the length of the rectangle?

- A. 1616 cm
B. 1818 cm
C. 1414 cm
D. 2020 cm

20. What is the least number of square tiles required to pave the floor of a room 15 m 17 cm long and 9 m 2 cm broad?

- A. 814814
B. 802802
C. 836836
D. 900

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1. Find the lateral surface area and the total surface area of a cuboid whose dimensions are 26 m, 14 m and 6.5 m
2. The dimensions of a room are 9 m \times 8 m \times 6.5 m. It has one door of dimensions 2 m \times 1.5 m and two windows each of dimensions 1.5 m \times 1 m. Find the cost of white washing the walls at \$6.40 per m²
3. Find the lateral surface area and the total surface area of a cube of edge 20 cm.
4. A roller is 150 cm long has a diameter of 70 cm. To level a play ground it takes 750 complete revolutions. Determine the cost of leveling the play ground at the rate of 75 cents per m²
5. The diameter of a cylinder is 28 cm and its height is 40 cm. Find the curved surface area, total surface area and the volume of the cylinder.
6. The curved surface area of a cone is 4070 cm² and its diameter is 70 cm. What is its slant height?
7. The circumference of the base of a cone is 44 cm and its slant height is 25 cm. Find the volume and curved surface of the cone.
8. Find the total surface area of a hemisphere of radius 10 cm. $\pi=3.14$
9. If the radius of a balloon is doubled by pumping air into it, find the ratio of the two surface areas.
10. A water tank in the form of a cuboid is 6 m long, 5 m wide and 4.5 m deep. Find the capacity of the tank in liters if 1 m³ = 1000 liters.
11. If the surface area of a cube is 864 cm², find the volume of the cube.
12. The diameters of two cones are equal. If their slant heights are in the ratio 5:4, find the ratio of their curved surface area.
13. 50 circular plates, each of radius 7 cm and thickness 12 cm are placed one above the other to form a solid right circular cylinder. Find the total surface area and volume of the cylinder.
14. A powder tin has a square base with side 12 cm and height 17.5 cm. Another is cylindrical with diameter of its base 12 cm and height 17.5 cm. Which has more capacity and by how much?
15. Find the volume, curved surface area and the total surface area of a cone whose height the slant height are respectively 6 cm and 10 cm respectively. $\pi=3.14$.
16. The radius and height of a right circular cone are in the ratio 5:12. If its volume is 314 cm³, find its slant height.

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17. The volume of a sphere is 38808 cm^3 . Find its radius and hence its surface area.
18. The surface areas of two spheres are in the ratio 1:4. Find the ratio of their volumes.
19. A solid metallic cylinder of base radius 3 cm and height 5 cm is melted to form a cone of height 1 cm and base radius 1 mm. Find the number of cones formed.
20. A cone is 8.4 cm high and the radius of its base is 2.1 cm. It is melted and recast into a sphere. Find the radius of the sphere.
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