

Practice Set on Perimeter, Area, and Volume (Medium Level)

1. Find the perimeter of a rectangle with length 15 cm and width 9 cm.
2. Calculate the area of a trapezium with parallel sides 8 m and 12 m and height 5 m.
3. Find the volume of a cylinder with radius 7 cm and height 10 cm. (Use $\pi = 3.14$)
4. A triangle has sides 7 cm, 24 cm, and 25 cm. Calculate its perimeter.
5. Calculate the surface area of a cube with edge length 6 cm.
6. Find the area of a sector with radius 5 m and central angle 60° .
7. Calculate the volume of a cone with height 12 cm and radius 4 cm. (Use $\pi = 3.14$)
8. Find the perimeter of an equilateral triangle with side length 14 cm.
9. Calculate the lateral surface area of a cylinder with radius 3 m and height 8 m. (Use $\pi = 3.14$)
10. The base of a triangle is 18 m and height is 24 m. Find its area.
11. Find the volume of a sphere with radius 10 cm. (Use $\pi = 3.14$, volume formula $\frac{4}{3}\pi r^3$)
12. A rectangle has area 96 m^2 and width 8 m. Find its length.
13. Find the perimeter of a regular hexagon with side 9 cm.
14. Calculate the total surface area of a cuboid with length 10 cm, width 5 cm, and height 4 cm.
15. Find the area of a parallelogram with base 12 m and height 7 m.
16. Calculate the volume of a prism with triangular base area 24 cm^2 and length 15 cm.
17. Find the perimeter of a semicircle with diameter 14 cm.
18. Calculate the surface area of a sphere with radius 7 cm. (Use $4\pi r^2$)
19. A trapezium has sides 9 m, 12 m, 7 m, and 7 m. Find its perimeter.
20. Find the volume of a cube with edge length 9 cm.
21. Calculate the area of a circle with circumference 31.4 m.
22. Find the surface area of a cone with radius 3 m, slant height 5 m. (Use $\pi = 3.14$)
23. The height of a trapezium is 10 cm, and the parallel sides are 12 cm and 18 cm. Find its area.
24. Calculate the perimeter of a rectangle whose diagonal is 13 m and length is 12 m.

25. Find the volume of a pyramid with square base edge 6 m and height 10 m.
26. Calculate the lateral surface area of a cylinder with diameter 16 cm and height 24 cm.
27. Find the area of an isosceles triangle with equal sides 13 cm and base 10 cm.
28. Calculate the curved surface area of a cone with radius 7 cm and height 24 cm.
29. The side length of a regular octagon is 5 cm. Find its perimeter.
30. Calculate the volume of a cylinder with base area 50 cm^2 and height 16 cm.
31. A circle sector has radius 10 m and arc length 15.7 m. Calculate the corresponding central angle.
(Use $\pi = 3.14$)
32. Find the surface area of a cuboid with dimensions 14 cm by 11 cm by 10 cm.
33. Calculate the total surface area of a cylinder with radius 5 cm and height 14 cm.
34. Find the area of a rhombus with diagonals measuring 9 cm and 12 cm.
35. Calculate the volume of a cone with base radius 6 m and height 14 m.
36. Calculate the perimeter of a pentagon with side length 15 cm.
37. Find the surface area of a sphere with diameter 16 cm.
38. A rectangle has perimeter 56 m and length 18 m. Find its width.
39. Calculate the area of a triangle with sides 7 cm, 9 cm, and 12 cm using Heron's formula.
40. Find the volume of a prism with triangular base of sides 5 cm, 6 cm, and 7 cm and length 20 cm.
41. Calculate the curved surface area of a cylinder with radius 4 cm and height 10 cm.
42. The radius of a circle is 14 cm. Find its area.
43. Find the lateral surface area of a cone with radius 10 cm and slant height 13 cm.
44. Calculate the volume of a cuboid measuring 8 m by 5 m by 3 m.
45. Find the perimeter of an equilateral triangle with side length 21 cm.
46. Calculate the total surface area of a cube with edge length 14 cm.
47. Find the area of a parallelogram with sides of 8 m and 12 m with angle between them 30° .
48. Calculate the volume of a sphere with radius 6 cm.
49. Find the area of a trapezium with parallel sides 15 cm and 7 cm and height 10 cm.
50. Calculate the volume of a cylinder with radius 3 m and height 20 m.
51. The triangle has sides 8 m, 15 m, and 17 m. Calculate its area using Heron's formula.

52. Find the volume of a prism with base area 50 m^2 and length 40 m.
53. Calculate the perimeter of a regular dodecagon with side length 6 cm.
54. Find the surface area of a cone with radius 12 cm and height 35 cm.
55. Calculate the area of a rhombus with side length 25 cm and height 10 cm.
56. Find the volume of a pyramid with square base edge 10 cm and height 15 cm.
57. The radius of a sphere is 9 cm. Calculate its surface area.
58. Calculate the area of a circle with radius 11 cm.
59. Find the curved surface area of a cone with radius 9 cm and slant height 24 cm.
60. Calculate the volume of a cuboid with dimensions 11 cm, 8 cm, and 13 cm.
61. A triangle with sides 9 cm, 10 cm and 13 cm—find its area using Heron's formula.
62. Calculate the area of a trapezium with parallel sides 18 m and 9 m and height 6 m.
63. Find the volume of a cylinder with radius 6 cm and height 15 cm.
64. Calculate the surface area of a cube with edge length 18 cm.
65. Find the perimeter of a square with diagonal length 20 cm.
66. Calculate the area of an isosceles triangle with equal sides 10 cm and base 12 cm.
67. Find the volume of a cylinder whose curved surface area is 150.72 cm^2 and radius 6 cm.
68. Calculate the total surface area of a cuboid with length 20 cm, width 12 cm, and height 10 cm.
69. Find the perimeter of a triangle with sides 14 cm, 15 cm, and 16 cm.
70. Calculate the area of a circle whose circumference is 62.8 m. (Use $\pi = 3.14$)
71. Find the curved surface area of a cone with radius 20 cm and height 21 cm.
72. Calculate the volume of a cube with edge length 22 cm.
73. Find the area of a parallelogram with base 18 m and height 8 m.
74. Calculate the volume of a pyramid with base area 80 cm^2 and height 25 cm.
75. Find the surface area of a sphere with radius 15 cm.
76. A right triangular prism has triangular base area 35 cm^2 and length 20 cm. Find its volume.
77. Calculate the total surface area of a cylinder with radius 7 m and height 10 m.
78. Find the area of the sector of a circle with radius 20 cm and central angle 45° .
79. Calculate the volume of a cone with height 18 cm and radius 9 cm.

80. Find the perimeter of a rectangle with diagonal length 26 m and width 10 m.
81. Calculate the area of a trapezium with parallel sides 22 cm and 28 cm and height 12 cm.
82. Find the volume of a cuboid with length 23 cm, width 10 cm and height 15 cm.
83. Calculate the lateral surface area of a cone with radius 5 cm and slant height 13 cm.
84. Find the volume of a cuboid with length 18 cm, width 12 cm, and height 10 cm.
85. Calculate the area of a square with diagonal length 15 cm.
86. Find the perimeter of a triangle with sides 13 cm, 14 cm, and 15 cm.
87. Calculate the surface area of a cube with edge length 25 cm.
88. A triangle has a base of 30 m and a height of 25 m. Find the area.
89. Calculate the volume of a cylinder with radius 10 cm and height 20 cm.
90. Find the surface area of a sphere with radius 20 cm.
91. Calculate the area of a circle with radius 18 cm.
92. Find the volume of a cube whose edge length is 30 cm.
93. Find the total surface area of a cylinder with radius 14 cm and height 10 cm.
94. Calculate the perimeter of a right triangle with legs 24 cm and 7 cm.
95. Find the volume of a prism with base area 62 m^2 and length 45 m.
96. Calculate the area of a trapezium with parallel sides 25 cm and 15 cm and height 12 cm.
97. Find the surface area of a cone with base radius 8 cm and height 15 cm.
98. Calculate the volume of a pyramid with square base edge 8 m and height 18 m.
99. Find the area of a rectangle with length 15 cm and perimeter 50 cm.
100. Calculate the lateral surface area of a cylinder with radius 14 cm and height 24 cm.