Acumen Teach
To the point

Geometry Master-box

Geometry —Measurements—Mathematical knowledge application—Data Analysis—Calculator—Shapes— Real life and context application.

Easy (12 Questions)	/12
Moderate(12 Questions)	/24
Difficult(12 Questions)	/36
Total Marks	**/72**
How did you do?	

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2 hours

38 Questions

Easy Questions

1. What is the size of each interior angle in a regular hexagon?

(1 marks)

2. Calculate the area of a rectangle with length 8 cm and width 5 cm.

(1 marks)

3. What is the circumference of a circle with radius 7 cm? (Use $\pi = 3.14$)

(1 marks)

4. A triangle has angles of 30°, 60°, and 90°. What type of triangle is this?

(1 marks)

5. Convert 5.2 km into metres.

(1 marks)

6. What is the perimeter of a square with side length 6 cm?

(1 marks)

7. Calculate the volume of a cube with edge length 4 cm.

(1 marks)

8. What is the size of one exterior angle of a regular pentagon?

(1 marks)

9. A circle has a diameter of 10 cm. What is its radius?

(1 marks)

10. Calculate the area of a triangle with base 10 cm and height 6 cm.

(1 marks)

11. What is the sum of the interior angles of a quadrilateral?

(1 marks)

12. Convert 4500 grams into kilograms.

(1 marks)

Moderate Questions

13. A parallelogram has a base of 12 cm and a height of 7 cm. Calculate its area.

(2 marks)

14. A sector of a circle has a radius of 8 cm and an angle of 45°. Calculate the area of the sector.

(2 marks)

15. A trapezium has parallel sides of 10 cm and 6 cm, and a height of 4 cm. Calculate its area.

(2 marks)

16. A cylindrical can has a radius of 5 cm and a height of 12 cm. Calculate its volume. (Use $\pi = 3.14$)

(2 marks)

17. Explain how you would compare the spread of two data sets using their ranges.

(2 marks)

18. A regular polygon has an exterior angle of 20°. How many sides does it have?

(2 marks)

19. A rectangle has a length of 12 cm and a width of 5 cm. Calculate its perimeter.

(2 marks)

20. A circle has a circumference of 31.4 cm. Calculate its radius. (Use $\pi = 3.14$)

(2 marks)

21. A triangular prism has a base area of 15 cm^2 and a height of 10 cm. Calculate its volume.

(2 marks)

22. A rhombus has diagonals of 10 cm and 8 cm. Calculate its area.

(2 marks)

23. A cube has a surface area of 150 cm². Calculate the length of one edge.

(2 marks)

24. A circle has an area of 78.5 cm². Calculate its radius. (Use $\pi = 3.14$)

(2 marks)

Difficult Questions

25. A regular hexagon has a side length of 6 cm. Calculate its area.

(3 marks)

26. A cone has a radius of 5 cm and a slant height of 13 cm. Calculate its total surface area. (Use $\pi = 3.14$)

(3 marks)

27. A cylindrical tank has a diameter of 14 cm and a height of 20 cm. Calculate its volume. (Use $\pi = 3.14$)

(3 marks)

28. A right-angled triangle has a hypotenuse of 15 cm and one side of 9 cm. Calculate the length of the other side.

(3 marks)

29. A sector of a circle has an area of 50 cm^2 and a radius of 10 cm. Calculate the angle of the sector. (Use $\pi = 3.14$)

(3 marks)

30. A rectangular prism has a volume of 240 cm^3, a length of 8 cm, and a width of 5 cm. Calculate its height.

(3 marks)

31. A regular octagon has a side length of 7 cm. Calculate its perimeter.

(3 marks)

32. A sphere has a radius of 6 cm. Calculate its volume. (Use $\pi = 3.14$)

(3 marks)

33. A trapezium has an area of 60 cm², parallel sides of 8 cm and 12 cm, and a height of 5 cm. Verify that the area is correct.

(3 marks)

34. A circle has a circumference of 62.8 cm. Calculate its area. (Use $\pi = 3.14$)

(3 marks)

35. A triangular prism has a base area of 12 cm² and a volume of 72 cm³. Calculate its height.

(3 marks)

36. A pyramid has a square base with side length 10 cm and a height of 12 cm. Calculate its volume.

(2 marks)