

# CBSE Sample Paper Class 7 Maths

Max. Marks 80

Section A contains 10 questions which carries 1 mark each (1 x 10 = 10)

Section B contains 9 questions which carries 2 marks each (2 x 10 = 20)

Section C contains 9 questions which carries 4 marks each (4 x 5 = 20)

Section D contains 6 questions which carries 6 marks each (6 x 5 = 30)

Topics:

- Comparing Quantities
- Practical Geometry
- Perimeter and Area
- Symmetry
- Visualizing Solid

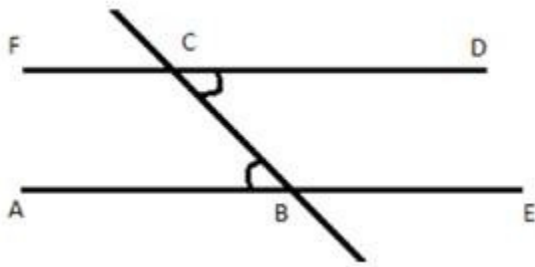
## Section A

1. Find the perimeter of a rectangle whose length is 25 cm and breadth is 18 cm.
2. Write frequency of all the numbers in the following data.  
8, 5, 8, 5, 3, 4, 7, 9, 7, 4, 3, 5, 3, 6, 4, 8
3. Find the number of lines of symmetry of a circle.
4. What will be the number of faces if there are 6 vertices and 12 edges?
5.  $\triangle ABC$  is right angled at B.  $AB = 3$  cm and  $BC = 4$  cm. Then, length of AC will be  
a) 25 cm c) 7 cm  
b) 5 cm d) 6 cm
6. Find the area of a square whose side is 6 cm.
7. A survey shows the ages of 10 teachers of a school as 32, 41, 26, 54, 33, 38, 40, 59, 43, 29. What is the age of the youngest teacher?
8. The number of faces of a triangular pyramid or tetrahedron is \_\_\_\_\_.  
a) 5 c) 6  
b) 4 d) 10
9. There are 2 red, 3 blue and 5 black balls in a bag. A ball is drawn from the bag without looking in to the bag. What is the probability of getting a red ball?  
a)  $\frac{2}{10}$  c)  $\frac{1}{5}$   
b)  $\frac{3}{10}$  d)  $\frac{1}{5}$
10. What is the circumference of a circular disc of radius 14 cm?

## Section B

11. A kennel can accommodate 10 dogs that weigh (in pounds) 14, 23, 17, 19, 27, 7, 33, 24, 11 and 13. Find the range of their weights.

12. In the following figure, FD and AE are parallel to each other and  $\angle ABC = 49^\circ$ . Then  $\angle ABC + \angle DCB$  is equal to



- A) 180  
 °C)98°B)100  
 °D)99°
13. The radius of a circular box is 10 cm. What should be the length of the tape required to wrap once around the pipe?

14. Name three letters of English alphabet which are symmetrical about  
 (i) a vertical axis

(ii) a horizontal axis

15. What are polyhedrons? Give two e.g.

16. One angle of a triangle is  $60^\circ$ . The other two angles are in the ratio of 5: 7. Find the two angles.

17. The numbers of roses in a garden on 30 days of a month are recorded as below. Prepare a frequency table for it.

40, 45, 43, 50, 62, 56, 50, 45, 40, 50, 52, 65, 62, 56, 45, 50, 60, 62, 68, 62, 55, 42, 45, 50, 60

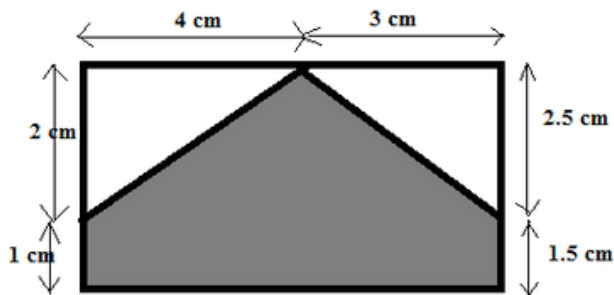
18. Draw a line, say PQ, take a point R outside it. Through R, draw a line parallel to PQ using ruler and compasses only.

19. A rectangular park is 25 m long and 15 m wide. A path 3 m is constructed outside the park. Find the area of the path.

20. Find the number of line of symmetry for regular pentagon.

### Section C

21. Find the area of the shaded region:

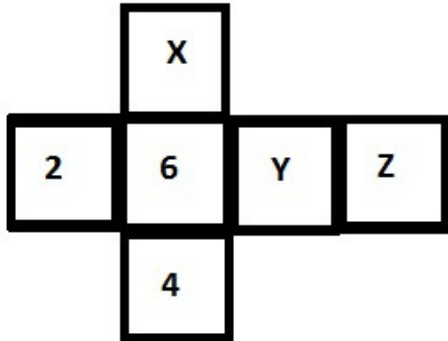


22. Write the coordinate of the reflection of the following;

i.  $(-7, -2)$  in the y – axis

ii.  $(4, -2)$  in the x –axis

23. Following figure represents net of die numbered from 1 to 6. The sum of numbers on opposite faces in a die is 7. What is the value of  $(X \times Y) + (Y \times Z)$ ?



24. Numbers 1 to 10 are written on ten separate slips (one number on one slip), kept in a box and mixed well. One slip is chosen from the box without looking in to it. What is the probability of getting a number 6 and a 4?

25. Write down objects which exhibit rotational symmetry. Can you tell the order of rotational symmetry for an equilateral triangle.

#### Section D

26. Let  $l$  be a line and  $P$  be a point not on  $l$ . Through  $P$ , draw a line  $m$  parallel to  $l$ . Now join  $P$  to any point  $Q$  on  $l$ . Choose any other point  $R$  on  $m$ . Through  $R$ , draw a line parallel to  $PQ$ . Let this

27. meet  $l$  at  $S$ . What shape do the two sets of parallel lines enclose?

Priyanka visits a departmental store and purchases the following articles:

- 2 rain coats for Rs. 500, sales tax at the rate of 12%
- One pair of sandals for Rs. 480, sales tax at the rate of 8%
- Food articles for Rs. 300, sales tax at the rate of 6%
- Clothes for Rs. 1200, sales tax at the rate of 2%

28. Calculate the total amount of the bill.

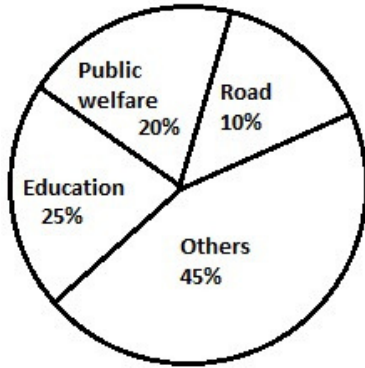
Classify the following statements under following categories certain to happen,

impossible to

happen, may or may not happen. Prepare a neat table and mark each statement under appropriate headings.

- Getting the sum of angles of a triangle as  $180^\circ$
  - India winning a cricket match against Pakistan
  - Sun setting in the evening
  - Getting 7 when a die is thrown
29. e. Sun rising from the west  
f. Winning a racing competition by you

The following pie chart depicts the expenditure of a state government under different heads.



- a. If the total spending is Rs.10 crores, how much money was spent on roads?
  - b. How many times is the amount of money spent on education compared to the amount spent on roads?
  - c. What fraction of the total expenditure is spent on both roads and public welfare together?
30. State and verify the Euler's Formula for a rectangular prism. What will be the number of faces of a polyhedron if the number of vertices are 6 and number of edges are 12?