

# CBSE Sample Paper

## Maths Set – B

### Class 8

**Total marks: 90**

1. All questions are compulsory.
2. The question paper consists of 34 questions divided into four sections A,B,C and D.
3. Section A contains 10 questions of 1 mark each, which are multiple choice type questions, Section B contains 8 questions of 2 marks each, Section C contains 10 questions of 3 marks each, Section D contains 6 questions of 4 marks each.
4. There is no overall choice in the paper. However, internal choice is provided in one question of 2 marks,3 questions of 3 marks and two questions of 4 marks.
5. Use of calculators is not permitted.

Time Allotted: 03:00:00

Maximum Marks:90

#### Section - A

- 1) After spinning the spinner given below, the probability of spinning even number is



(A)  $\frac{2}{8}$ .

(B)  $\frac{1}{2}$ .

(C)  $\frac{3}{8}$ .

(D)  $\frac{1}{3}$ .

**2)** The point (-7, -1) lies in the

(A) first quadrant.

(B) second quadrant.

(C) third quadrant.

(D) fourth quadrant.

**3)** In a two-digit number, the digit in the unit place is four times the digit in the tens place and the sum of the digits is equal to 10, then the number is

(A) 26.

(B) 28.

(C) 40.

(D) 82.

**4)** The volume of a cuboid is  $200 \text{ cm}^3$  and base area

is  $25 \text{ cm}^2$  then height of the cuboid is

(A) 4 cm.

(B) 8 cm.

(C) 10 cm .

(D) 12 cm.

**5)** The selling price of an object when 20% discount on marked price of Rs 4500 is

(A) Rs 4000.

(B) Rs 3600.

(C) Rs 3500.

(D) Rs 3000.

**6)** A quadrilateral has

(A) 4 elements.

(B) 8 elements.

(C) 10 elements

(D) 12 elements.

**7)** If the two quantities 'x' and 'y' vary in direct proportion then the value of y when X is 17 is

X	20	17
Y	40	?

(A) 34.

(B) 17.

(C) 1.

(D) 0.

**8)** Total views in any solid are

(A) 2.

(B) 3.

(C) 4.

(D) 5.

**Section - B**

9) A cylindrical tank has a capacity of 5632 m<sup>3</sup>. If the diameter of its base is 16 m, find its depth.

Or,

Find the area of a rhombus whose diagonals are of lengths 20 cm and 16 cm.

10) A bag has 10 red marbles and 6 blue marbles. A marble is drawn from the bag without looking into the bag. What is the probability of getting a blue marble?

11) Find two numbers whose product is a one digit number and sum is a two digit number .

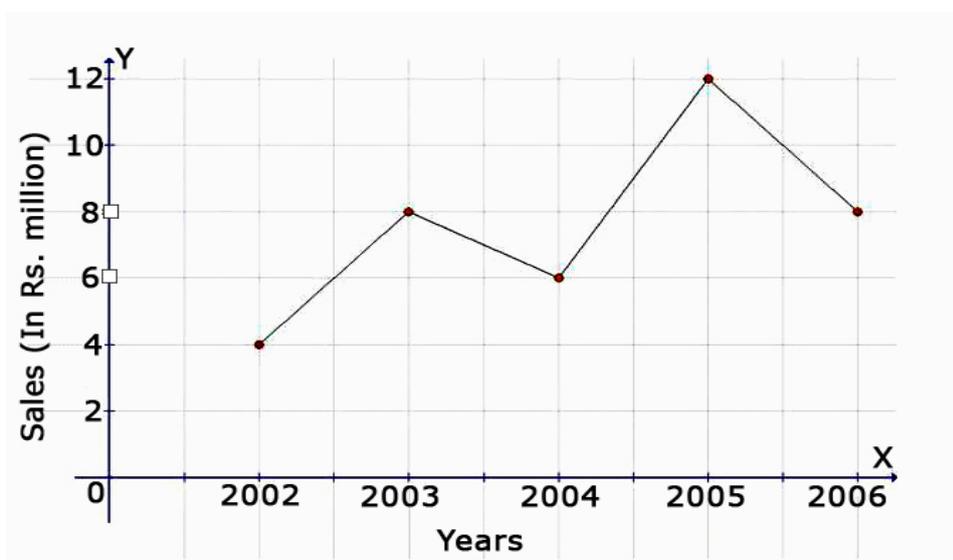
12) Give two basic differences between a prism and a pyramid.

13) 12 men can dig a trench in 8 days. How many men can dig the same in 6 days?

14) The ratio of two adjacent sides of a parallelogram is 4:5. If its perimeter is 72 cm, find its adjacent sides.

**Section - C**

15) In which year was there the greatest difference between the sales as compared to its previous year?



**16)** A bag contains 3 red and 2 blue marbles. A marble is drawn at random. What is the probability of drawing a blue marble?

**17)** Draw a histogram for the following data:

Class Interval	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60
Frequency	30	20	10	90	50	10	30	10	10	40

**18)** A shopkeeper offers his customers 10% discount and still makes a profit of 26%. What is the actual cost of an article marked Rs 280?

**Or,**

Harish sold a bicycle at 8% gain. Had it been sold for Rs 75 more, the gain would have been 14%. Find the cost price of the bicycle.

**19)** Shruti borrows Rs 12,000 at 10% per annum for 3 years at simple interest and Shalini borrows the same amount for the same period at 8% per annum compounded annually. Who pays more interest and by how much?

**20)** Construct the quadrilateral PQRS where PQ = 4 cm, QR = 6 cm, RS = 5 cm, PS = 5.5 cm and PR = 7 cm.

**21)** In a building there are 4 cylindrical pillars. The radius of each pillar is 21 cm and height is 5 m. Find the curved surface area of four pillars.

**Or,**

A rectangular paper of width 7 cm is rolled along its width and a cylinder of radius 20 cm is formed. Find the volume of the cylinder.

**22)** A batch of bottles were packed in 25 boxes with 12 bottles in each box. If the same batch is packed using 20 bottles in each box, how many boxes would be filled?

**23)** A two digit number exceeds the sum of the digits of that number by 18. If the digits at the unit's place is double the digit in the ten's place, find the number.

**Or,**

In a two digit number the digit in the one's place is three times the digit in the ten's place and the sum of the digits is equal to 12. What is the number?

**24)** The difference between a two digit number and the number obtained by interchanging its digits is 63. What is the difference between the two digits of the number?

#### Section - D

**25)** Parul is driving a car constantly at a speed of 30 km/h. Draw a distance-time graph in this case. Also, find the time taken by Parul to cover a distance of 120 km.

**Or,**

Mayank deposited Rs. 1400 in a bank at the rate of 10% per annum. Draw a linear graph which shows the relationship between time and the interest earned by Mayank.

**26)** The perimeter of a parallelogram is 140 cm. If one of the sides is greater than the other by 20 cm, find the lengths of all the sides of the parallelogram.

**27)** If the following three digit numbers are divisible by 3,

(i)  $223x4$  (ii)  $4543x$  (iii)  $2562x1$  (iv)  $3495x$

then what is the value of  $x$ ?

**28)** When a die is thrown, list the outcomes of an event of getting a

- (a) composite number.
- (b) non-composite number.
- (c) number greater than 4.
- (d) number not greater than 3.

**29)** A washing machine was sold for Rs. 5760 after giving successive discounts of 15% and 10% respectively. What was the marked price?

**30)** The marked price of a television is 25% more than the cost price. It is sold at a discount of 10%. If the marked price is Rs. 12,000, then find the cost price, selling price and the profit. What will be the percentage of profit?

**31)** If the following three digit numbers are divisible by 9,

- (i)  $23 \times 4$  (ii)  $543 \times$  (iii)  $62 \times 1$  (iv)  $23495 \times$

then what will be the value of  $x$ ?

**32)** A train can finish a journey in 10 hours, travelling at a speed of 56 km/h. If another faster train is to cover the same journey in 8 hours, what would be the average speed of the new train?

**33)** 10 men working for 6 days mow an area of 5 acres. If there are 8 men working to mow 4 acres of land, how many days will it take?

**34)** A pool is 20 m long, 15 m broad and 4 m deep. Find the cost of cementing its floor and its walls at the rate of Rs. 12 per square metre.

**Or,**

A rectangular piece of iron sheet is 44 m long and 20 m broad. It is rolled along its length to form a cylinder. Find the volume of the cylinder so formed.