

CBSE Sample Paper

Maths Set – A

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 getting an odd number is



- (A) $\frac{2}{8}$.
- (B) $\frac{1}{2}$.
- (C) $\frac{3}{8}$.

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

2) To construct a quadrilateral if the two adjacent sides are given, still there is a need for measurement of

(A) two angles.

(B) other two sides.

(C) diagonals.

(D) three angles.

3) The diameter of a circle with radius 4 cm is

(A) 2 cm.

(B) 8 cm.

(C) 16 cm.

(D) 32 cm.

4) In a function $y = 3x$ if the value of x is 3, then the value of 'y' is

(A) 9.

(B) 6.

(C) 3.

(D) 0.

5) The usual form of $1000 \times 3 + 100 \times 6 + 10 \times 0 + 1 \times 9$ is

(A) 3691.

(B) 3619.

(C) 3609.

(D) 3069.

6) The simple interest on Rs. 12500 at 12% per annum for 3 yrs is

(A) Rs. 6000.

(B) Rs. 5000.

(C) Rs. 4500.

(D) Rs. 2500.

7) In the following table x and y are in direct variation.

(A) 8.

(B) 4.

(C) 2.

(D) 0.

8) The 3-D shapes have only

(A) length.

(B) breadth.

(C) height

(D) length, breadth and height.

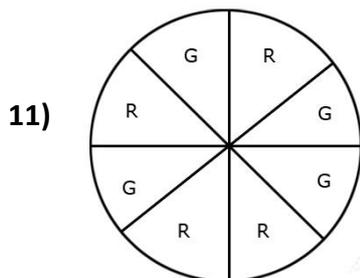
Section - B

9) Find the total surface area of a cube whose volume is 343 cm^3 .

Or,

Find the volume of a cuboid whose length is 8 cm, width is 3 cm and height is 5 cm.

10) The adjacent sides SP and PQ of a parallelogram PQRS are 4 cm each. State the measure of all the sides. What is another name of this figure?



On spinning the wheel,

(i) what will be the probability of getting a green (G) sector?

(ii) what will be the probability of not getting a green (G) sector?

12) For the given solid, identify the top view, front view and side view.

13) There are 100 students in a hostel. The food provision for them is for 15 days. How long will there provision last if 20 more join the group?

14) If $51x3$ is a multiple of 9 (where x is a digit), find the value of x .

Section - C

15) Make a table of values for the function $y = 3x$. From the table find the values of y when $x = 4$ and $x = 5$.

16) A godown is in the form of a cuboid of measures 60 m 40 m 20 m. How many cuboidal boxes can be stored in it if the volume of one box 0.8 m³?

Or,

Find the area of a rhombus whose side is 5 cm and its altitude is 4 cm. If one of its diagonal is 8 cm long, find the length of the other diagonal.

17) A card is drawn at random from a pack of 52 cards. Find the probability that the card drawn is a black king.

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

(i) a prime number.

(ii) a number greater than 5.

(iii) a composite number.

19) 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,

A person sells an article for Rs 550, gaining $\frac{1}{10}$ of its C.P. Find gain%.

20) Rahul bought an air conditioner for Rs 22,000 including a tax of 10%. Find the price of the air conditioner before VAT was added.

21) Construct the quadrilateral ABCD in which $AB = 4.5$ cm, $BC = 5.5$ cm, $CD = 4$ cm, $AD = 6$ cm and $AC = 7$ cm.

22) Fill in the numbers from 7 to 12 (without repetition) so that each side of the given magic triangle adds up to 30.

23) The scale of a map is given as $1 : 40000000$. Two cities are 4 cm apart on the map. Find the actual distance between them.

24) A two digit number exceeds the sum of the digits of that number by 18. If the digit 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?

Section - D

25) Reena deposited Rs. 12000 in a bank at the rate of 10% per annum. Draw a linear graph showing the relationship between the time and simple interest. Also, find the simple interest for 4 years.

Or,

A train is moving at a constant speed of 75

km/h. Draw a distance – time graph.

(i) How far will it travel in 2 hours 30 minutes?

(ii) Find the time required to cover a distance of

300 km.

26) In an army camp, there are 800 soldiers. There is enough food for them for 60 days. If 400 more soldiers arrive at the camp, how many days will the food last?

27) Working for 8 hours daily, 40 people can dig the foundation of a building in 21 days. Working for 10 hours daily, if the work is to be finished in 14 days, how many people are needed to do the same work?

28) The cost of papering the wall of a room, 12 m long, at the rate of Rs. 1.35 per square meter is Rs. 340.20. The cost of matting the floor at Re. 0.85 per square metre is Rs. 91.80. Find the height of the room.

Or,

A cylindrical container of radius 28 cm contains sufficient water to submerge a rectangular solid of dimensions 32 cm 22 cm 14 cm. Find the rise in the level of water, when the solid is completely submerged.

29) ABCD is a trapezium with $AB \parallel CD$, and $A=50^\circ$ and $B = 50^\circ$. Prove that

(i) $BC = DA$

(ii) $C = D$ and find the measurement of C.

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

(i) 223×4 (ii) $4543 \times x$ (iii) 2562×1 (iv) $3495 \times x$

then what is the value of x?

31) The number of apples collected from 50 trees is recorded below:

35, 67, 24, 111, 78, 45, 38, 52, 15, 25, 73, 84, 65, 18, 82, 63, 78, 142, 23, 69, 32, 56, 12, 15, 55, 98, 71, 12, 9, 62, 6, 138, 102, 123, 46, 89, 110, 128, 48, 19, 53, 85, 70, 112, 148, 133, 63, 80, 98, 96.

Make a group frequency table and represent the data by using a histogram.

32) Check the divisibility of the following numbers by 9.

(i) 72163458, (ii) 23457891,

(iii) 12304905, (iv) 30458091

33) Mr. Kashiv sold his old chair at a loss of 15%. If he had sold it for Rs. 800 more, he would have received a profit of 5%. Find the cost price of the table.

34) Rakesh bought a watch for Rs. 800 and sold it for Rs. 1000. Mukesh bought a car for Rs. 4,00,000 and sold it for Rs. 4,20,000. Who made a better sale, Rakesh or Mukesh?