

# CBSE Sample Paper class 6 Maths Set 1

**SUBJECT: MATHEMATICS****CLASS : VI****MAX. MARKS : 80****DURATION : 3 HRS****General Instructions:**

- (i). All questions are compulsory.
- (ii). This question paper contains **30** questions divided into four Sections A, B, C and D.
- (iii). **Section A** comprises of 6 questions of **1 mark** each. **Section B** comprises of 6 questions of **2 marks** each. **Section C** comprises of 10 questions of **3 marks** each and **Section D** comprises of 8 questions of **4 marks** each.
- (iv). Use of Calculators is not permitted

**SECTION – A**

1. Write the following numbers with appropriate signs : (a) 100 m below sea level. (b) 25°C above 0°C temperature.
2. Following table shows the number of bicycles manufactured in a factory during the year 1998 to 2002. In which year were the maximum number of bicycles manufactured ?

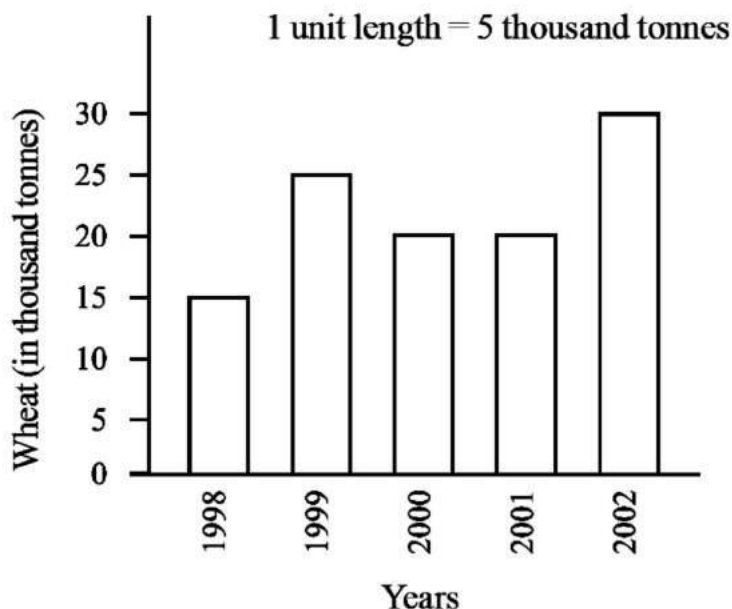
Years	No.of bicycles manufactured
1998	800
1999	600
2000	900
2001	1100
2002	1200

3. The length of Ramesh's notebook is 9 cm 5 mm. What will be its length in cm?
4. Find the area of a rectangle whose length and breadth are 12 cm and 4 cm respectively.
5. Find the ratio of 30 minutes to 1.5 hours.
6. If there are 50 mangoes in a box, write the total number of mangoes in terms of the number of boxes?

**SECTION – B**

7. Divide Rs 60 in the ratio 1 : 2 between Kriti and Kiran.
8. Pinky runs around a square field of side 75 m, Bob runs around a rectangular field with length 160 m and breadth 105 m. Who covers more distance and by how much?
9. On a squared paper, sketch the triangle with a horizontal line of symmetry but no vertical line of symmetry.












































10. Find the rule, which gives the number of matchsticks required to make matchstick pattern of letter T as  $\overline{\text{T}}$ . Use a variable to write the rule.
11. Draw a line segment of length 9.5 cm and construct its perpendicular bisector.
12. The bar graph given alongside shows the amount of wheat purchased by government during the year 1998-2002. Read the bar graph and write down your observations. In which year was (a) the wheat production maximum? (b) the wheat production minimum?



### SECTION – C

13. Find  
(a)  $(-7) - 8 - (-25)$   
(b)  $(-13) + 32 - 8 - 1$  (c)  $(-7) + (-8) + (-90)$
14. Express as kg using decimals:  
(a) 2 g (b) 3750 g (c) 12 kg 150g
15. State the number of lines of symmetry for the following figures: (a) An equilateral triangle (b) An isosceles triangle (c) A square
16. A piece of string is 30 cm long. What will be the length of each side if the string is used to form :  
(a) a square? (b) an equilateral triangle? (c) a regular hexagon?
17. Construct with ruler and compasses, angles of following measures: (a)  $60^\circ$  (b)  $90^\circ$
18. Out of 1800 students in a school, 750 opted basketball, 800 opted cricket and remaining opted table tennis. If a student can opt only one game, find the ratio of  
(a) Number of students who opted basketball to the number of students who opted table tennis.  
(b) Number of students who opted cricket to the number of students opting basketball. (c) Number of students who opted basketball to the total number of students.

19. Find the cost of fencing a rectangular park of length 175 m and breadth 125 m at the rate of Rs 12 per metre.
20. Cost of a dozen pens is Rs 180 and cost of 8 ball pens is Rs 56. Find the ratio of the cost of a pen to the cost of a ball pen.
21. Give expressions for the following cases.  
(a) 7 added to  $p$  (b) 7 subtracted from  $p$  (c)  $p$  multiplied by 7
22. Following is the pictograph of the number of Auto manufactured by a factory in a particular week.

Days	Number of Auto manufactured	 = 300 Autos
Monday	      	
Tuesday	         	
Wednesday	    	
Thursday	     	
Friday	    	
Saturday	        	

- (a) On which day were the least number of Autos manufactured?  
(b) On which day were the maximum numbers of Auto manufactured?  
(c) Find out the approximate number of Auto manufactured in the particular week?

### SECTION – D

23. Cost of 5 kg of wheat is Rs 30.50.  
(a) What will be the cost of 8 kg of wheat?  
(b) What quantity of wheat can be purchased in Rs 61?
24. How many tiles whose length and breadth are 12 cm and 5 cm respectively will be needed to fit in a rectangular region whose length and breadth are respectively: (a) 100 cm and 144 cm (b) 70 cm and 36 cm.
25. Complete the table and by inspection of the table find the solution to the equation  $m + 8 = 14$ .
- |         |   |   |   |   |   |   |   |   |   |
|---------|---|---|---|---|---|---|---|---|---|
| m       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| $m + 8$ |   |   |   |   |   |   |   |   |   |

26. The number of Mathematics books sold by a shopkeeper on six consecutive days is shown below:

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Number of books sold	65	40	30	50	20	70

Draw a bar graph to represent the above information choosing the scale of your choice.

27. Take Sarita's present age to be  $y$  years (i) What will be her age 5 years from now?  
(ii) What was her age 3 years back?  
(iii) Sarita's grandfather is 6 times her age. What is the age of her grandfather?  
(iv) Grandmother is 2 years younger than grandfather. What is grandmother's age?
28. Draw a circle with centre  $C$  and radius 3.4 cm. Draw any chord  $AB$ . Construct the perpendicular bisector of  $AB$  and examine if it passes through  $C$ .
29. A car travels 90 km in  $2\frac{1}{2}$  hours.  
(a) How much time is required to cover 30 km with the same speed?(b) Find the distance covered in 2 hours with the same speed.
30. Split the following shapes into rectangles and find their areas. (The measures are given in centimetres)

