

# CBSE Class 6 Maths Sample Paper SA 2 Set 2

Time Durations: 3hrs

Class VI

Maximum Marks :100

## General Instructions:

1. This paper is divided into four sections A, B, C and D.
2. Section A comprises of **10** questions of **1** mark each.
3. Section B comprises of **7** questions of **3** marks each. Attempt **any 5** questions.
4. Section C comprises of **12** questions of **4** marks each. Attempt **any 10** questions.
5. Section D comprises of **6** questions of **7** marks each. Attempt **any 5** questions.
6. Draw neat diagrams wherever necessary.
7. Show the required calculations in fair.

## Section – A

- Q.1** Express  $\frac{27}{5}$  as a mixed fraction.
- Q.2** Express 70km 5m as kilometer using decimals.
- Q.3** Express  $5\frac{3}{7}$  as improper fraction.
- Q.4** Write two ones and five tenths as decimal.
- Q.5** Show 1.9 on the number line.
- Q.6** The perimeter of a regular hexagon whose side is x units is \_\_\_\_\_.
- Q.7** Write expression for the following:  
11 subtracted from 2m
- Q.8** The length of a lizard is 20cm and the length of a crocodile is 4m what is the ratio of the length of the crocodile to the length of the lizard.
- Q.9** Fill in the blank:  
 $\frac{16}{24} = \frac{12}{\square}$
- Q.10** The letter D is symmetrical with:  
i) Three lines of symmetry  
ii) One line of symmetry  
iii) Two lines of symmetry  
iv) None of these

## Section – B (Attempt any five questions)

- Q.1** Aakash bought vegetables weighing 10kg. Out of this, 3kg 500g is onions, 2kg 75g is tomatoes and the rest is potatoes. What is the weight of the potatoes?

- Q.2** On a squared paper, sketch the following:
- A quadrilateral with both horizontal and vertical lines of symmetry.
  - A quadrilateral with a horizontal line of symmetry but no vertical line of symmetry.
  - A triangle with no lines of symmetry.
- Q.3** Fill up using one of these '>', '<' or '='
- $\frac{3}{2}$   1
  - $\frac{4}{4}$   1
  - $\frac{7}{8}$   1
- Q.4** Determine if 33, 121, 9, 96 are in proportion.
- Q.5** Meena, Beena and Leena are climbing the steps to the hill top. Meena is at step  $s$ , Beena is 8 step ahead and Leena 7 steps behind. Where are Beena and Meena? The total number of steps to the hill top is 10 less than 4 times what Meena has reached. Express the total number of steps using  $s$ .
- Q.6** Divide 20 pens between Sheela and Sangeeta in the ratio of 3:2.
- Q.7** Given AB of length 7.3cm and CD of length 3.4cm, construct a line segment XY such that the length of XY is equal to the difference between the lengths of AB and CD. Verify by measurement.

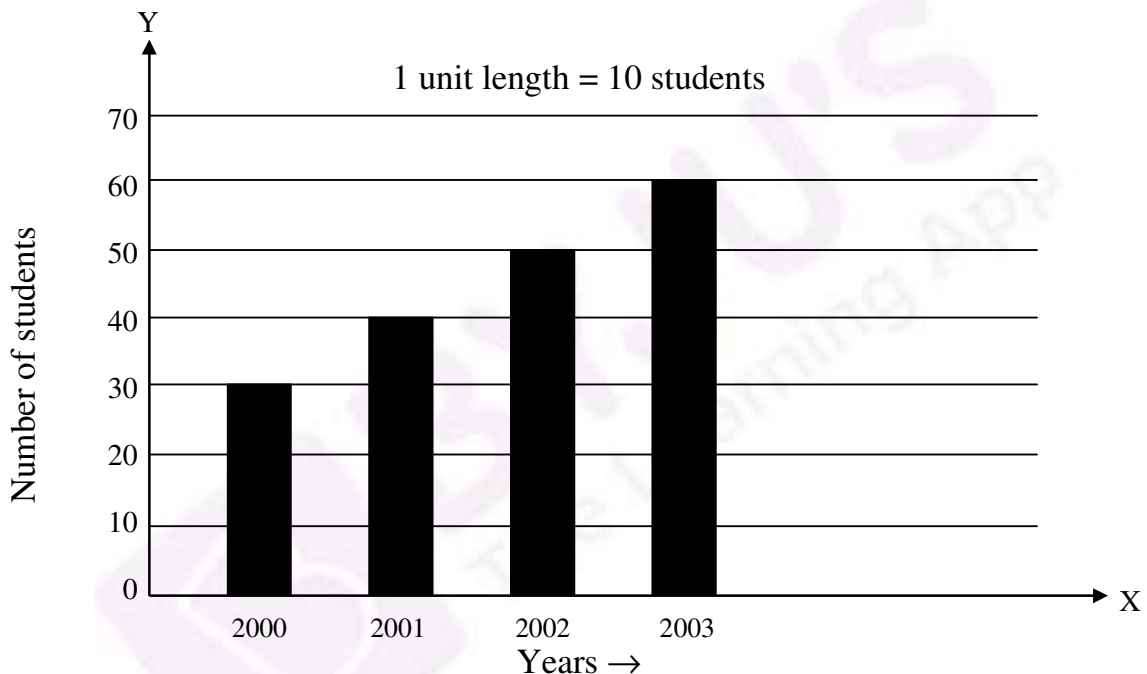
### Section – C (Attempt any ten questions)

- Q.1** Solve:-
- $\frac{2}{3} + \frac{3}{4} + \frac{1}{2}$
  - $3\frac{1}{2} - 2\frac{3}{4}$
- Q.2** Jaidev takes  $2\frac{1}{5}$  minutes to walk across the school ground. Rahul takes  $\frac{7}{4}$  minutes to do the same. Who takes less time and by what fraction?
- Q.3** Find the following:
- $280.69 + 25.2 + 38$
  - Subtract 2.015 km from 5 km
- Q.4** The following are the number of electric bulbs purchased for a lodging house during the first four month of a year.

Months	Number of bulbs
January	20
February	26
March	30
April	34

Represent the details by a pictograph.

- Q.5** How many tiles whose length and breadth are 12cm and 5cm respectively will be needed to fit in a rectangular region whose length and breadth are respectively 144cm and 1m.
- Q.6** 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.
- Q.7** Change the following statements using expressions into statements in ordinary language.
- Tony puts  $q$  marbles on the table. He has  $8q$  marbles in his box.
  - Our class has  $n$  students. The school has  $20n$  students.
  - Jaggu is  $z$  years old. His uncle is  $4z$  years old and his aunt is  $(4z - 3)$  years old.
  - In an arrangement of dots there are  $r$  rows. Each row contain 5 dots.
- Q.8** Read the adjoining bar graph showing the number of students in a particular class of a school.

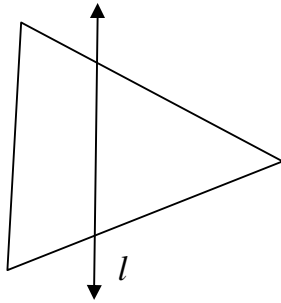


Answer the following –

- What is the scale of this graph?
  - How many new students are added every year?
  - Is the number of students in the year 2003 twice that in the year 2000?
  - How many students were added by the year 2003 from the year 2001?
- Q.9** A car travels 90 km in  $2\frac{1}{2}$  hours.
- How much time is required to cover 30km with the same speed
  - Find the distance covered in 2 hours with the same speed.
- Q.10** Construct with ruler and compass angles of the following measures:
- $30^\circ$
  - $135^\circ$

**Q.11** Draw  $\angle POQ$  of measure  $75^\circ$  and find its line of symmetry.

**Q.12** In the figure,  $l$  is the line of symmetry. Draw the image of the triangle and complete the diagram so that it becomes symmetric.



### Section – D (Attempt any five questions)

**Q.1** Do as directed:

- Draw and Colour  $\frac{1}{4}$  part of a triangle.
- What fraction of a day is 8 hrs.
- Show  $\frac{3}{5}$  on a number line.
- Fill in the box :  $\square - \frac{3}{6} = \frac{3}{6}$
- Find the equivalent fraction of  $\frac{2}{9}$  with denominator 36.

**Q.2** Express:

- 5 paise as rupees.
- 419cm in m.
- 60mm in cm.
- 8888m in km.
- 5kg 8g in kg.

**Q.3** Draw a circle of radius 4cm. Draw any two of its chords. Construct the perpendicular bisectors of these chords. Where do they meet?

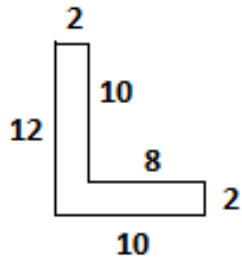
**Q.4** Following tables show the number of bicycles manufactured in a factory during the year 1998 to 2002. Illustrate this data using a bar graph. Choose a scale of your choice.

Years	Number of bicycles manufactured
1998	800
1999	600
2000	900
2001	1100
2002	1200

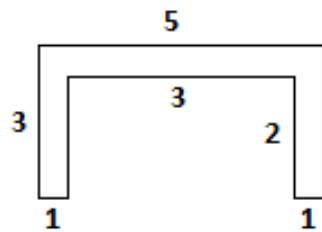
- In which year was the maximum number of bicycles manufactured.
- In which year was the minimum number of bicycles manufactured?

**Q.5** Split the following shapes into rectangles and find their areas. (The measures are given in centimeters)

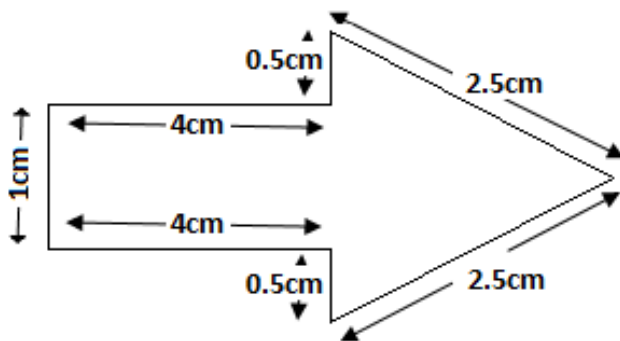
a)



b)



c) Find the Perimeter of the figure given below:



**Q.6** i) Pick out the solution from the values given in the bracket next to each equation. Show that the other values do not satisfy the equation.

a)  $-5m = 60$   $(-12, 12)$

b)  $P - 5 = 5$   $(0, 10)$

c)  $\frac{q}{2} = 7$   $(7, 14)$

ii) Write the rule which gives the number of match sticks required to make the following match stick pattern. Use a variable to write the rule.

a) A pattern of letter V as

b) A pattern of letter A as

c) A pattern of letter S as

d) A pattern of letter U as