

CBSE Class 6 Maths Sample Paper SA 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:

- i) A quadrilateral with both horizontal and vertical lines of symmetry.
- ii) A quadrilateral with a horizontal line of symmetry but no vertical line of symmetry.
- iii) A triangle with no lines of symmetry.

Q.3 Fill up using one of these '>', '<' or '='

i) $\frac{3}{2}$ 1

ii) $\frac{4}{4}$ 1

iii) $\frac{7}{8}$ 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:-

a) $\frac{2}{3} + \frac{3}{4} + \frac{1}{2}$

b) $3\frac{1}{2} - 2\frac{3}{4}$

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:

a) $280.69 + 25.2 + 38$

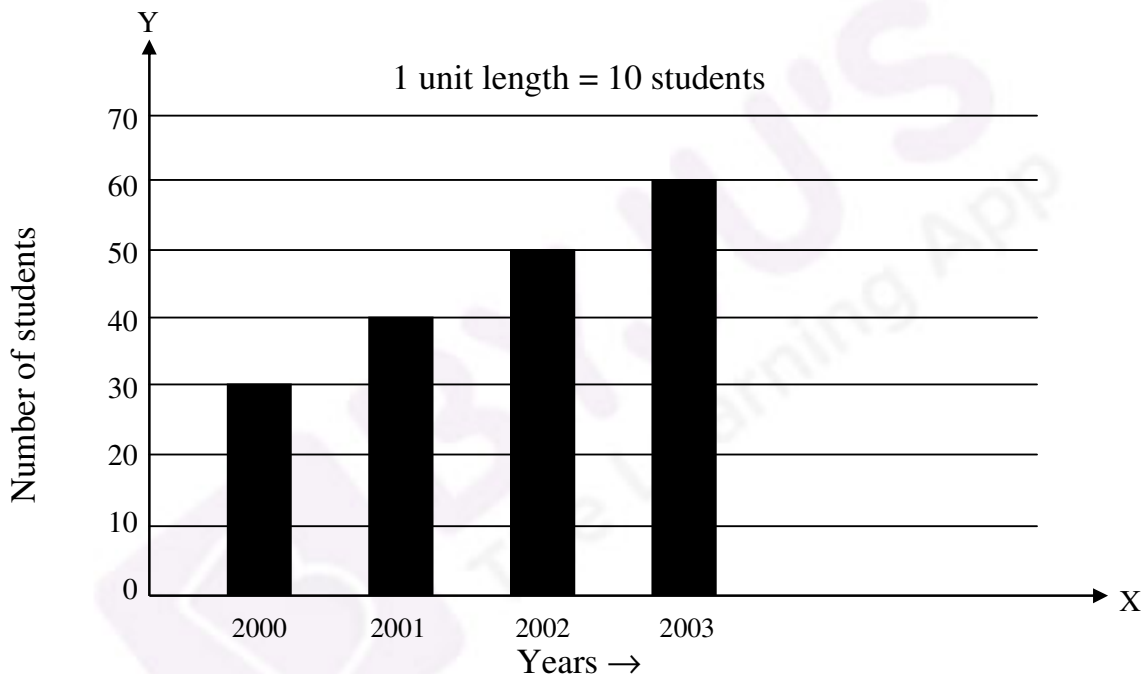
b) Subtract 2.015 km from 5 km

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.

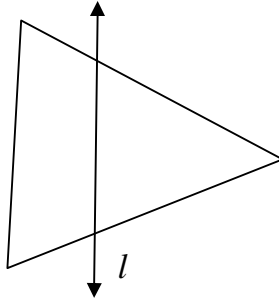


Answer the following –

- 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°
 - 135°

Q.11 Draw $\angle POQ$ of measure 75° 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?

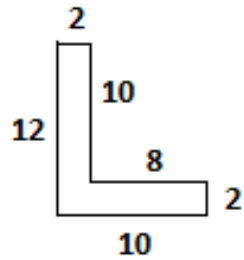
Q.4 Following tables show the number of bicycles manufactured in a factory during the year 1998 to 2002. Illustrate this data using a bar graph. Choose a scale of your choice.

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

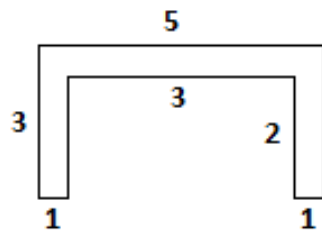
- In which year was the maximum number of bicycles manufactured.
- In which year was the minimum number of bicycles manufactured?

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

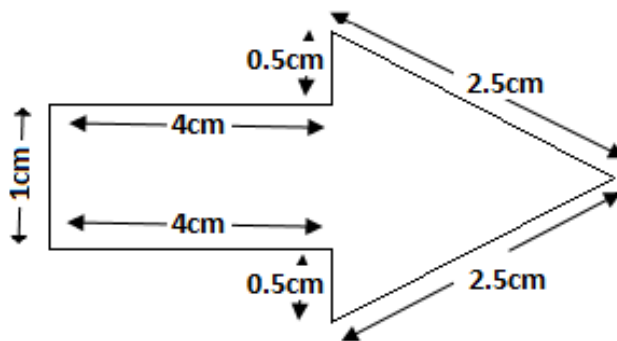
a)



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