CBSE Class 6 Maths Sample Paper SA 2

Max. Marks 80

General Guidelines:
- The question paper consists of 30 questions divided into four sections A, B, C and D.
- All the questions are compulsory
- **Section A contains 10 questions which carries 1 mark each (1 x 10 = 10)**
- **Section B contains 9 questions which carries 2 marks each (2 x 10 = 20)**
- **Section C contains 9 questions which carries 4 marks each (4 x 5 = 20)**
- **Section D contains 6 questions which carries 6 marks each (6 x 5 = 30)**
- The use of calculators is prohibited

SECTION A

1. An equilateral triangle has how many lines of symmetry

   Option A: 1
   Option B: 2
   Option C: 3
   Option D: None of these

2. The perimeter of a rectangle having length equal to 5.5 cm and breadth 3 cm is
   Option A: 15 cm
   Option B: 19 cm
   Option C: 17 cm
   Option D: None of these

3. If A, B, C are three points on a line such that AB = 4 cm, BC = 2 cm and AC= 6 cm, which one of them lies between other two?
   Option A: A
   Option B: B
   Option C: C
   Option D: None of these

4. What is the measure of one complete revolution

   Option A: 90°
   Option B: 180°
   Option C: 270°
   Option D: 360°

5. Question: A line segment of length 45 cm is placed in front of a plane mirror. What is the length of the image formed?

   Option A: 54 cm
   Option B: 45 cm
   Option C: 100 cm
   Option D: 45/2 cm

6. Question: A line segment of length 24 cm was divided into 3 equal parts namely AB, BC and CD starting from left to right. On the rightmost end, a mirror is kept. What is the distance of an object kept at point B from its image in the mirror?

   Option A: 48 cm
   Option B: 24 cm
   Option C: 16 cm
   Option D: 32 cm

7. Some carrots were kept on a table. Out of those 35 were taken out in evening and 40 in night. The number of carrots left can be represented in equation form as

   Option A:$(x - 35) + 40$
   Option B: $(x + 35) - 40$
   Option C: $(x - 35) - 40$
   Option D: $(x \times 35) - 40$

8. The cost price of m books is $5m$. If total purchased books is 32.Find the cost price of all the books
   Option A: Rs.32
   Option B: Rs.160
   Option C: Rs.380
   Option D: Rs.100

9. Rohan went to a park whose length was 2500 m and width was 1200 m. He took 5 rounds of the park, at the same speed. Considering that he travelled along the boundary, what is the perimeter of the park?

   Option A: 5000 m
   Option B: 7400 m
   Option C: 2400 m
   Option D: 37000 m

10. A rectangle of length 50 m and width 30 m was to be fenced along the boundaries. Find the perimeter of another rectangle of twice the length and half the width of the given rectangle.

Option A: 230 m^2
Option B: 230 m
Option C: 160 m
Option D: 160 m^2

SECTION B

11. A line segment of length 24 cm was divided into 3 equal parts namely AB, BC and CD starting from left to right. On the rightmost end, a mirror is kept. What is the distance of an object kept at point D from the image of point D in the mirror?

12. The tally marks given below represents what frequency?

$$\mathbb{N} \text{ III}$$

13. According to the following table, what is the difference between the number of bikes sold in 2006 and 2010.

| Year	Bikes Sold
2005	**153225**
2006	**226525**
2007	**854263**
2008	**685422**
2009	**212552**
2010	**584622**

14. The marks scored by 4 students in three different subjects are as shown. Who scored maximum in Math?
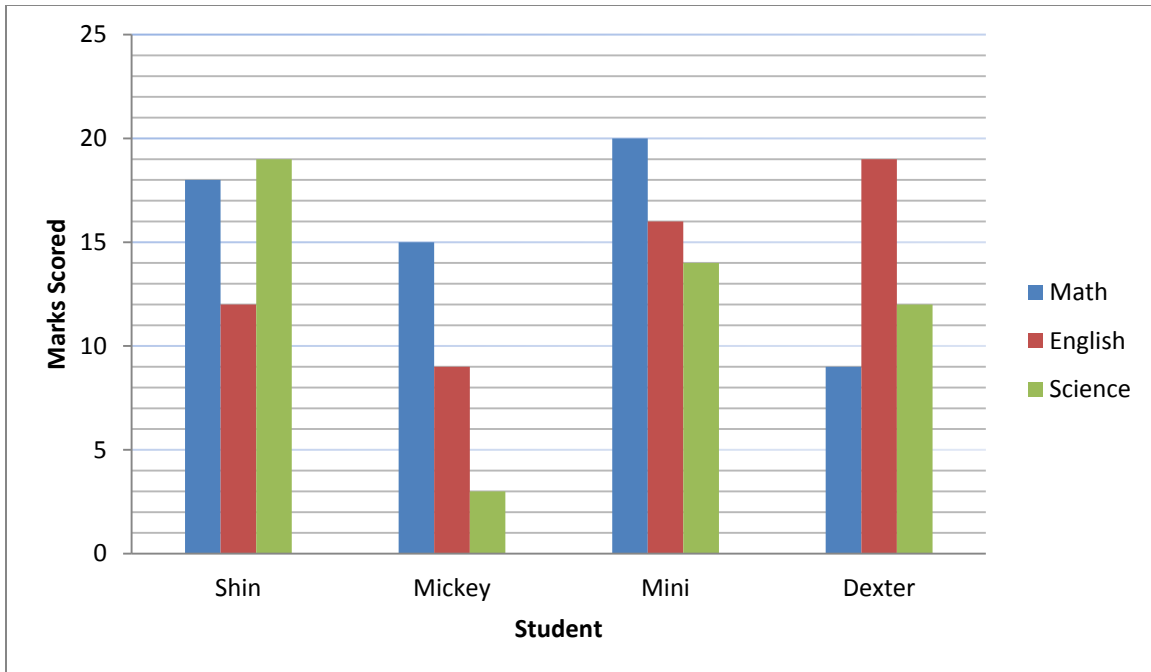
15. Area of a rectangular field is 450 m^2. The breadth of the field is 15 m. What is the ratio of length and area of the rectangular field?

16. In the following equation, find the ratio of a and b.
$$\frac{a}{50} = \frac{8}{b} = \frac{2}{5}$$

17. For every step that Ram takes, Sita takes 3 steps. If the number of steps taken by Sita is x, then what will be the number of steps taken by Ram ?

18. If $y = \frac{x+3}{12}$ Find the value of y if $x = 45$

19. The total number of lotuses in a lake grows in such a way that their number is increases twice the previous day. For e.g. If there are x lotuses on 1st day, then on 2nd day there will be $2x$ lotuses, 3rd day there will be $(2 \times 2x = 4x)$ lotuses and so on. If there are 255 lotuses on 5th day, find the total number of lotuses on 7th day.

20. The heights of 3 students are given by the bar graph below. What is the difference between the height of Barry and Joe?

Height in cms.
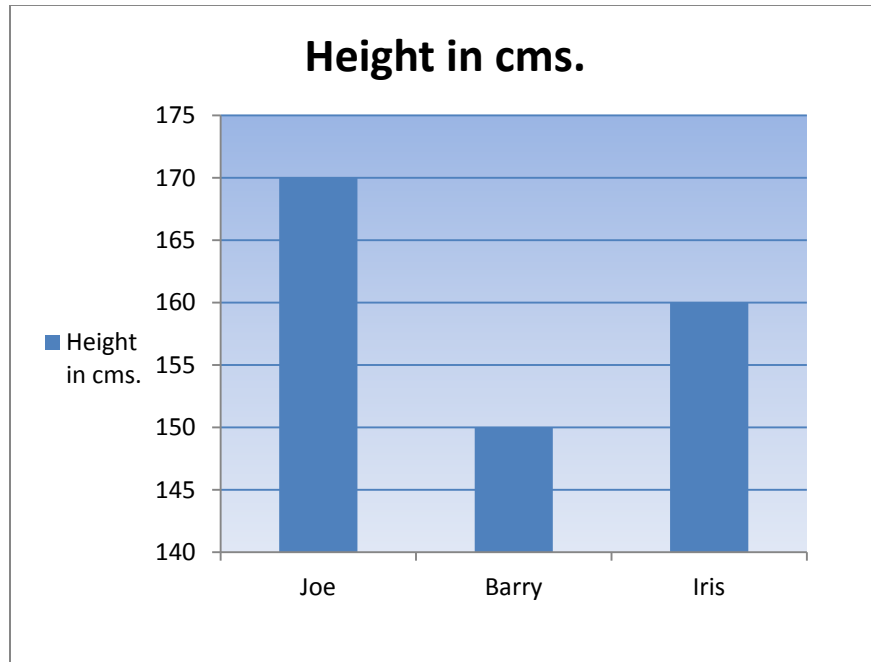
SECTION C

21. The ration of length and breadth of a rectangular field are in the ratio 3:2. The cost of fencing the field at Rs. 6.50 per meter is Rs. 520. Find the dimension of the field.
22. Draw the perpendicular bisector of line segment PQ of length 10. 2 cm.
23. The bar graph given below shows the sale of shirts in a shop from Monday to Saturday
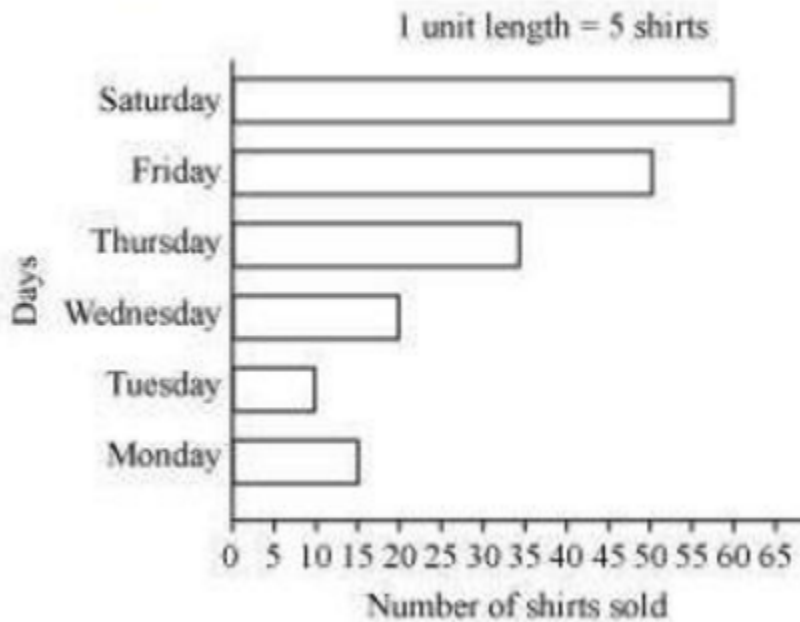
a. What is the scale chosen on the horizontal line representing the number of shirts
b. On which day was the maximum number of shirts sold and how many shirts were sold on that day?

    c.   On which day was the minimum number of shirts sold and how many shirts were sold on that day?

    d.   How many shirts were sold on Thursday?

24. A child has x marbles initially. He goes on adding 10 marbles to his collection every day. Find the total number of marbles he has on 31st day.

25. Solve for x:

$$\frac{4}{5}x - \frac{9}{5} = \frac{6}{10}$$

SECTION D

26. Construct an angle of 135° using ruler and compass only.

27. A car requires 108 litres of petrol for covering a distance of 594 km. How much petrol will be required by the car to cover 1650 km?

28. Cost of 5 kg wheat is Rs. 30.50
    a.   What will be the cost of 8 kg wheat?
    b.   What quantity of wheat can be purchased for Rs. 61?

29. Consider the letters of English alphabet, A to Z. List among them the letters which have
    a.   Vertical lines of symmetry
    b.   Horizontal lines of symmetry
    c.   No lines of symmetry

30. A bus travels at v km/hr. It is going from Lucknow to Gorakhpur. After the bus has travelled for 5 hours, Gorakhpur is still 20 km away. What is the distance from Lucknow to Gorakhpur? Express it using v.