

MATHEMATICS
CLASS VIII
SA-1
Assignment No. 8
Ch 16 Introduction to Graphs

1. Tick the correct alternative :
 - i. The point of intersection of co-ordinate axes is called

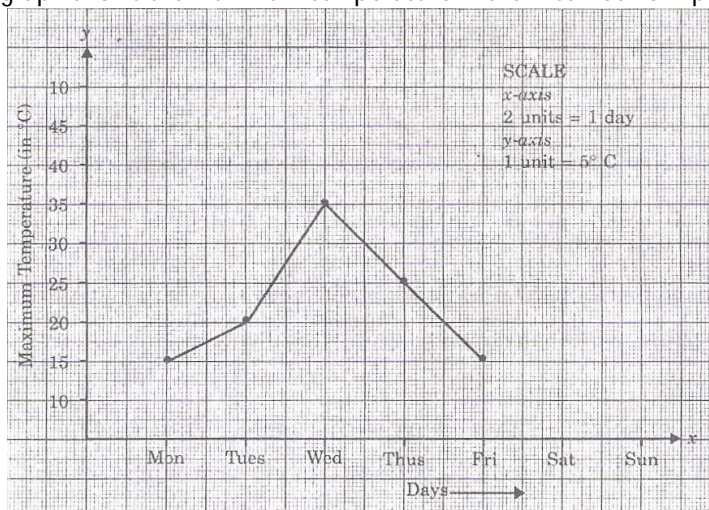
a) Common point	b) Zero point	c) Origin	d) Null point
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 - ii. x -coordinate of a point on y -axis is

a) x	b) 1	c) y	d) 0
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 - iii. The point $(-1, -5)$ lies in

a) First quadrant	b) Second quadrant	c) Third quadrant	d) Fourth quadrant
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 - iv. The point $(0, -4)$ lies on

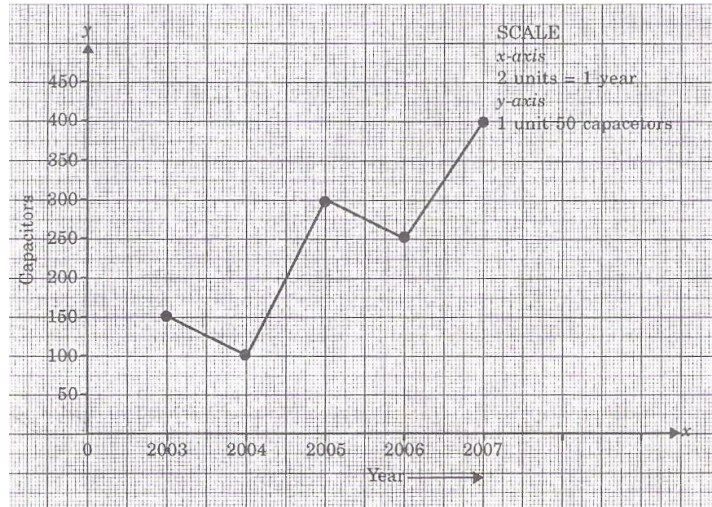
a) +ve x -axis	b) +ve y -axis	c) -ve y -axis	d) -ve x -axis
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2. The following graph shows the maximum temperature in the first week of April.



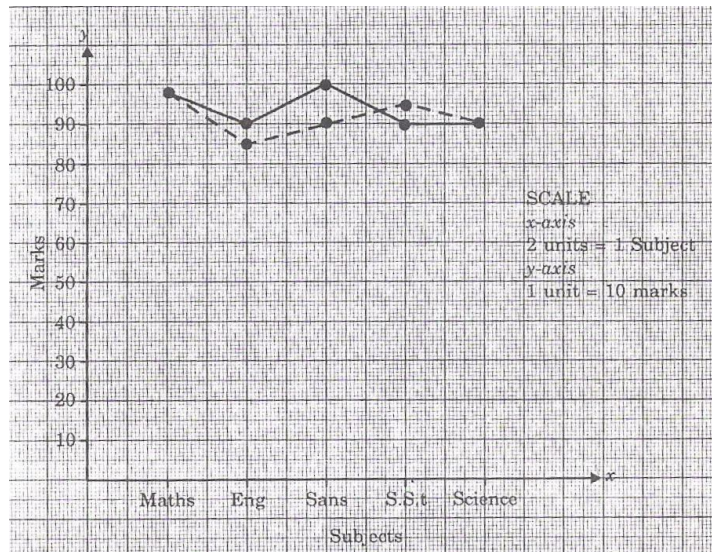
- a) What was the temperature on Thursday?
 - b) When was the maximum temperature 35°C ?

3. The following line graph shows the sale of capacitors in the last 5 years. Read the graph and answer the questions that follow:



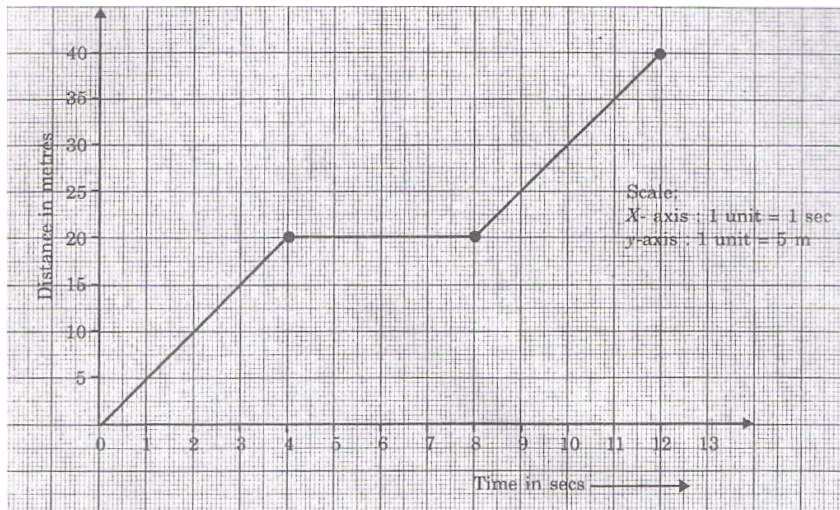
- What were the sales in (i) 2004 (ii) 2006?
- In which year was the sale maximum?
- Compute the difference between the year when the sales were maximum and the year in which the sales were minimum.

4. Ruchi is the school topper. Her predicted marks in class X boards and her actual marks are shown in the graph below. The dotted line represents the predicted marks and the solid line represents the actual marks.



- In which subject were the actual marks and the predicted marks equal?
- What were the maximum marks scored by Ruchi (actually) and in which subject?
- In which subject did the actual marks differ the most from the predicted marks?

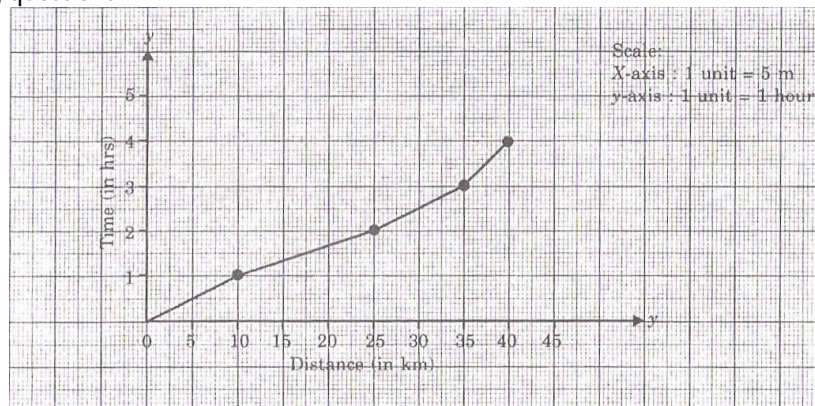
5. The graph shows the path of a cyclist.



Answer the questions given below.

- What is the average speed during the first part of the journey?
- For how long did he rest?
- What was the average speed during the second part of the journey?

6. The graph represents the journey of a camel in the Thar Desert. Read and answer the following questions:



- What is the average speed of the camel?
- In what time did the camel travel first 25 km?
- What was his speed during the last one hour?

7. Plot the points on a graph paper. Verify if they lie on a line.

- A(0,2) B(-2,2) C(2,2)
- A(3,3) B(4,3) C(3,1)

8. I. Write the abscissa (x -coordinate) of each of the following:

- (6,5)
- (0,-3)
- (8,2)

- II. Write the abscissa (x -coordinate) of each of the following:

- (2,3)
- (7,-3)
- (5,-5)

Q 9-13 What value do you inculcate from the graphs?

9. The following table shows the marks obtained by a student in various class tests:
Plot a graph using the table below:

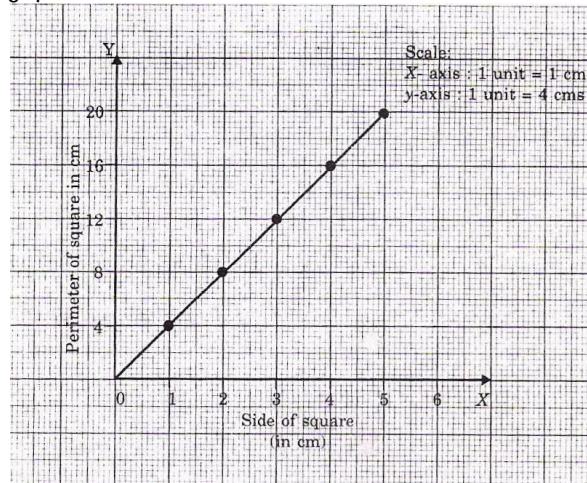
Unit Test	I	II	III	IV

Marks	30	42	60	80
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10. Iron is heated and its temperature is noted at different intervals of time as given in the following table. Plot a graph using the figures in the table.

Time(in seconds)	0	2	6	12	14
Temperature(in °C)	20	22	27	32	39

11. The following graph shows the side of a square and its perimeter. Read the graph and answer the following questions:



- What is the perimeter of the square when the side is 4 cm?
- What is the side of the square if the perimeter is 12 cm?

12. A bank gives **20%** interest on deposits. Draw a graph to illustrate the relation between the number of years and the simple interest earned when the sum deposited is Rs 100.

13. Plot the graphs for the values of the following table:

a) Cost of oranges

Number of oranges	1	5	7	12	15
Cost (in Rs)	3	15	21	36	45

b) Consumption of rice by children in a hostel

Number of children	10	15	20	25	30
Rice (in kg)	15	22.5	30	37.5	45

c) Distance travelled by a car and time taken

Distance (in km)	40	70	100	140	190	250
Time (in hours)	1	2	3	4	5	6