

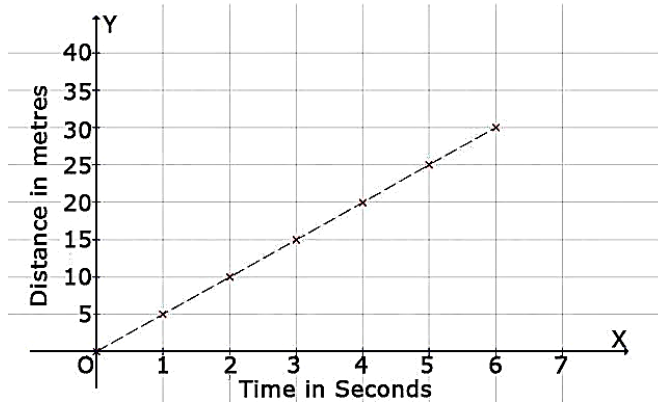
Board – CBSE

Class – 8th

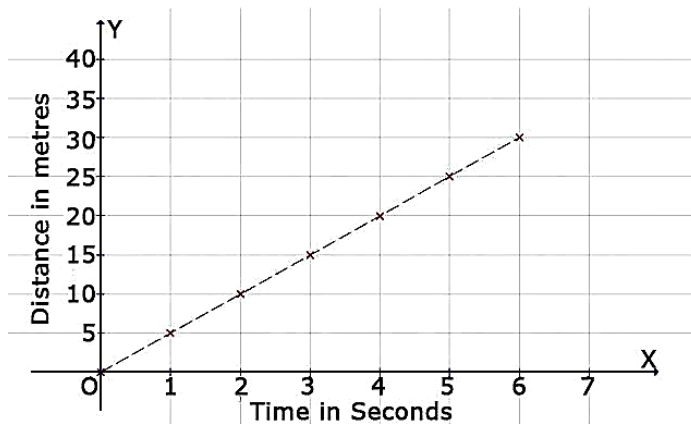
Topic – INTRODUCTION TO GRAPHS

SECTION-A

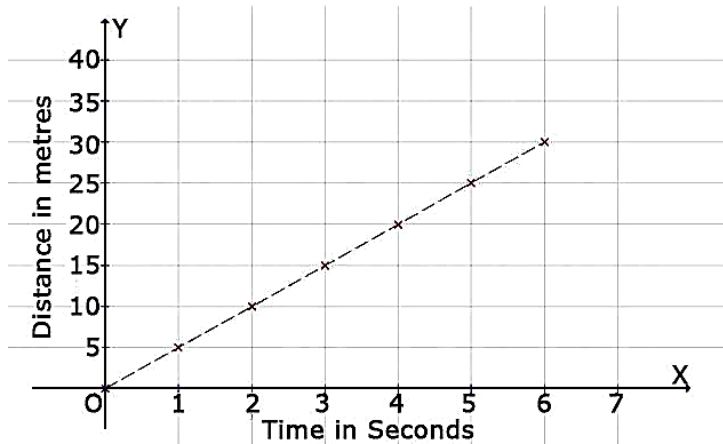
1. Find the distance covered in 3 seconds.



2. Find the distance covered in 5 seconds.



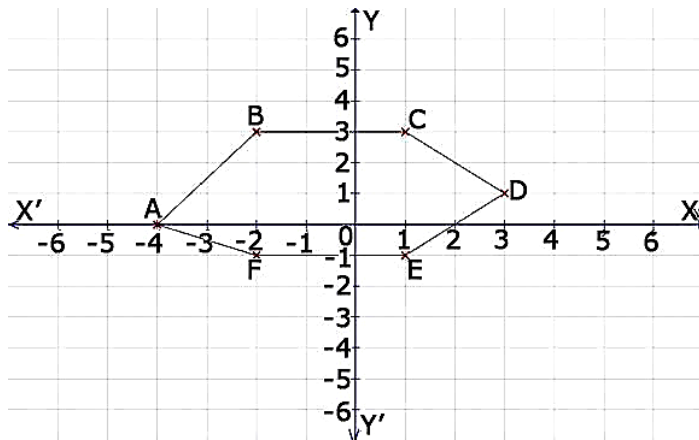
3. Find the time taken by a body to cover 30 metres.



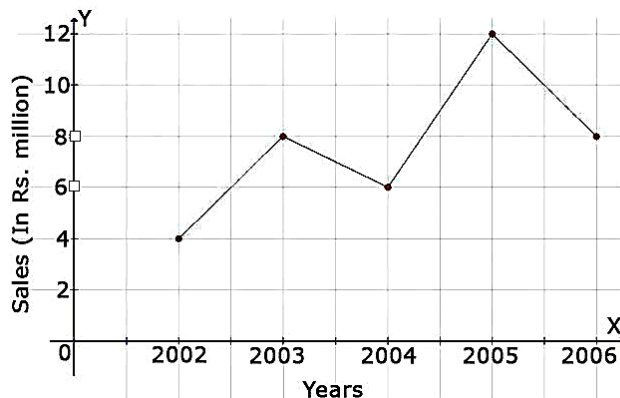
4. In which quadrant does the point $P(-4, 1)$ lie?
5. In which quadrant does the point $Q(-2, -6)$ lie?

SECTION-B

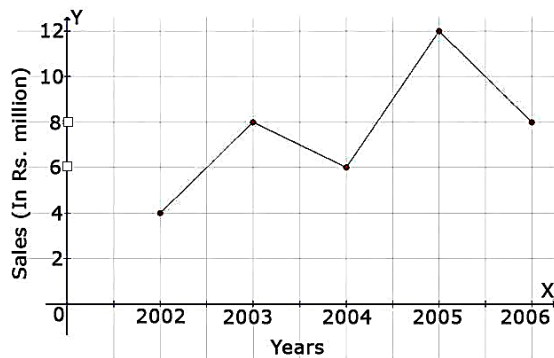
1. Find the coordinates of the points A, B, C, D, E and F from the graph.



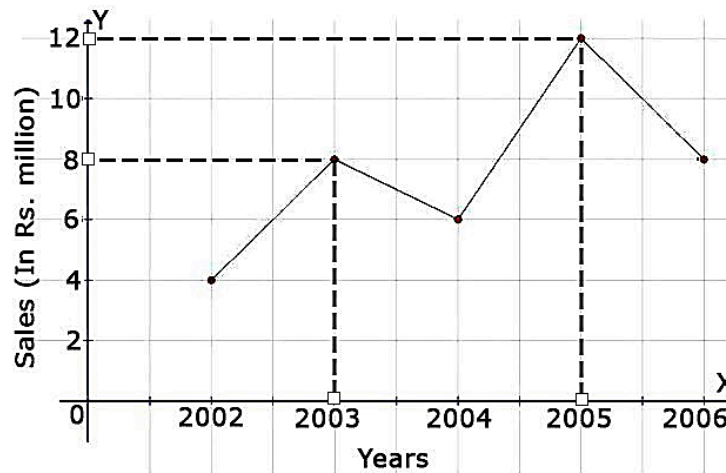
2. The line graph shows the yearly sales figure for a manufacturing company. From the graph, what were the sales in 2004 and 2006?



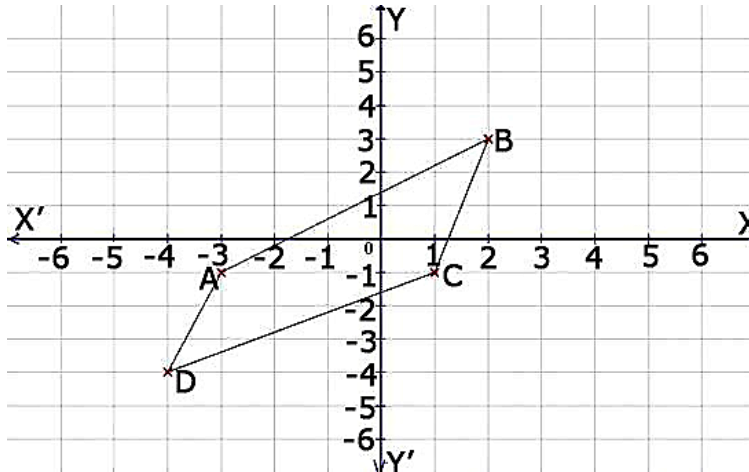
3. The line graph given shows the yearly sales figure for a manufacturing company. From the graph, what were the sales in 2003 and 2005?



4. From the given graph, compute the difference between the sales 2003 and 2005.

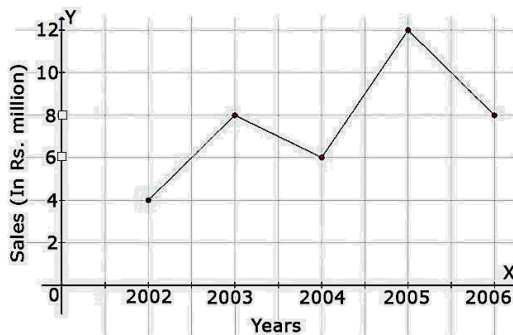


5. From the graph write the coordinates of the A, B, C and D.



SECTION- C

1. In which year was there the greatest difference between the sales as compared to its previous year?



2. Make a table of values for the function $y = 3x$. From the table find the values of y when $x = 4$ and $x = 5$.
3. The approximate speeds of some objects are given below. Draw a bar graph to represent them.

Name of objects	Bicycle	Scooter	Car	Bus	Train
Speed (I km/hr)	10	40	60	50	80

4. Hundred students from a certain locality use different modes of traveling to school as given below. Draw a bar graph.

Bus	Car	Rickshaw	Bicycle	Walk	Bus
32	16	24	20	8	32

5. In a class of 40 students, the marks obtained (out of 50) are as given below:

Marks	0-10	10-20	20-30	30-40	40-50
No. of students (frequency)	5	10	12	8	5

Draw a histogram to represent the given data.

SECTION- D

- Reena deposited Rs. 12000 in a bank at the rate of 10% per annum. Draw a linear graph showing the relationship between the time and simple interest. Also, find the simple interest for 4 years.
- A train is moving at a constant speed of 75 km/h. Draw a distance – time graph.
 - How far will it travel in 2 hours 30 minutes?
 - Find the time required to cover a distance of 300 km.
- A bank gives 10% simple interest on savings account. Draw a linear graph to show the relationship between the sum deposited and simple interest earned. Also, answer the following questions:
 - Find the interest earned on an investment of Rs. 300.
 - What investment should be made to earn Rs.70 as interest?
- Mayank deposited Rs. 1400 in a bank at the rate of 10% per annum. Draw a linear graph which shows the relationship between time and the interest earned by Mayank.
- If $y = x^2$, then draw a graph.

SECTION- E

- Draw the graph for the following table of values.
Interest on deposits for a year.

Deposit in Rs	1000	2000	3000	4000	5000
Interest in Rs	60	120	180	240	300

- Use the graph to find the interest on a deposit of Rs 4500 for a year.
 - To get an interest of Rs 420, how much money should be deposited?
 - Does the graph pass through origin?
- Draw the graph for a function $A = x^2$ (Area of a square = side²). Make a table when the side of a square is
2 cm, 3 cm, 4 cm, 5 cm, 6 cm and 7 cm. Is it a linear graph?

MATHEMATICS



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