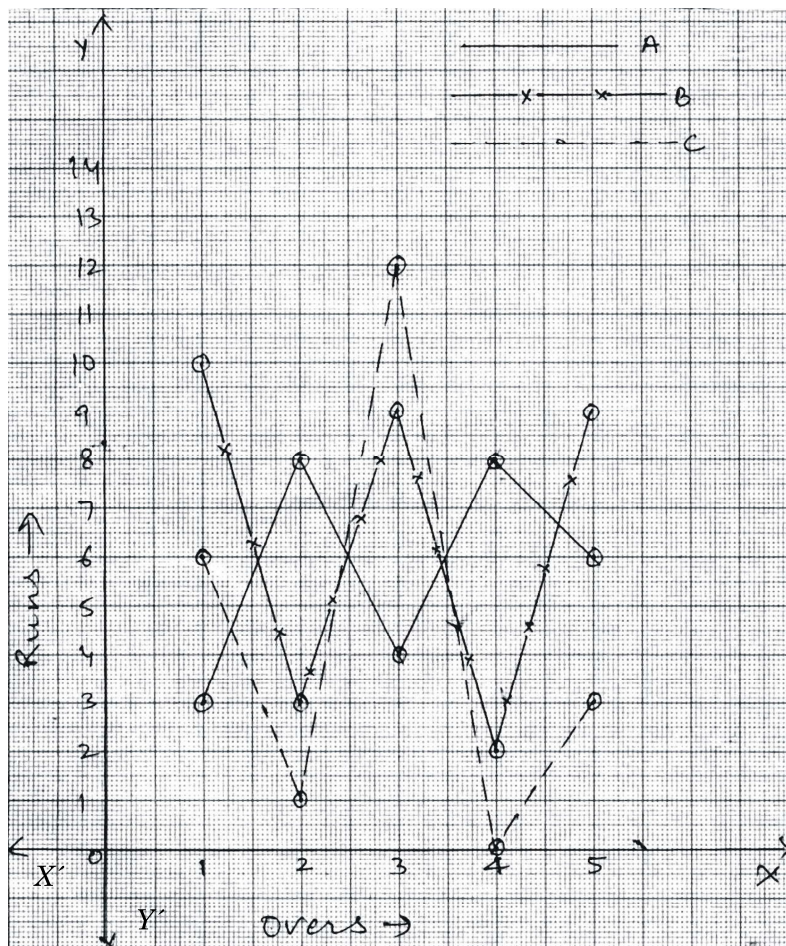


CHAPTER 15

INTRODUCTION TO GRAPH

QUESTIONS

Read the following graph carefully in which runs scored by three batsman *A*, *B* and *C* are shown. Answer the questions that follow (1 – 6) :



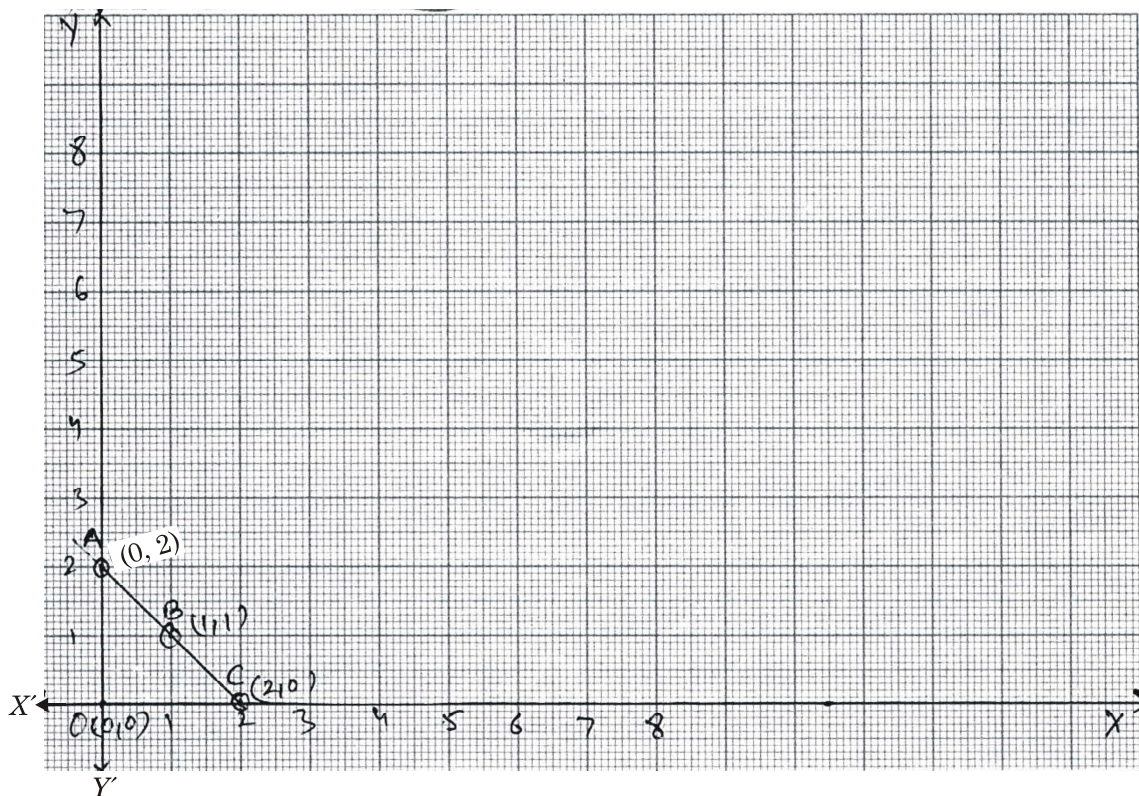
1. Name the batsman who scored 9 runs twice in his allotted 5 overs.
2. Which of the three batsman could not score even a single run in any of the 5 overs?
3. Whose performance was most steady?
4. What is the total score of batsman A after 5 overs?
5. Which batsman scored highest runs in an over?
6. Which batsman scored thrice the score more than 8?
7. Choose the points whose joining will result in a square :

$A(0, 0), B(4, 3), C(0, 2), D(2, 0), E(3, 4), F(2, 2)$

8. Ramesh Kumar's water bill shows quantity of water consumed in liters and amount of water consumed. Identify the dependent and independent variables in the above statement.
9. Choose the points which if joined, the obtained figure will be a rectangle :

$A(1, 1), B(7, 6), C(1, 4), D(1, 0), E(3, 4), F(3, 1).$

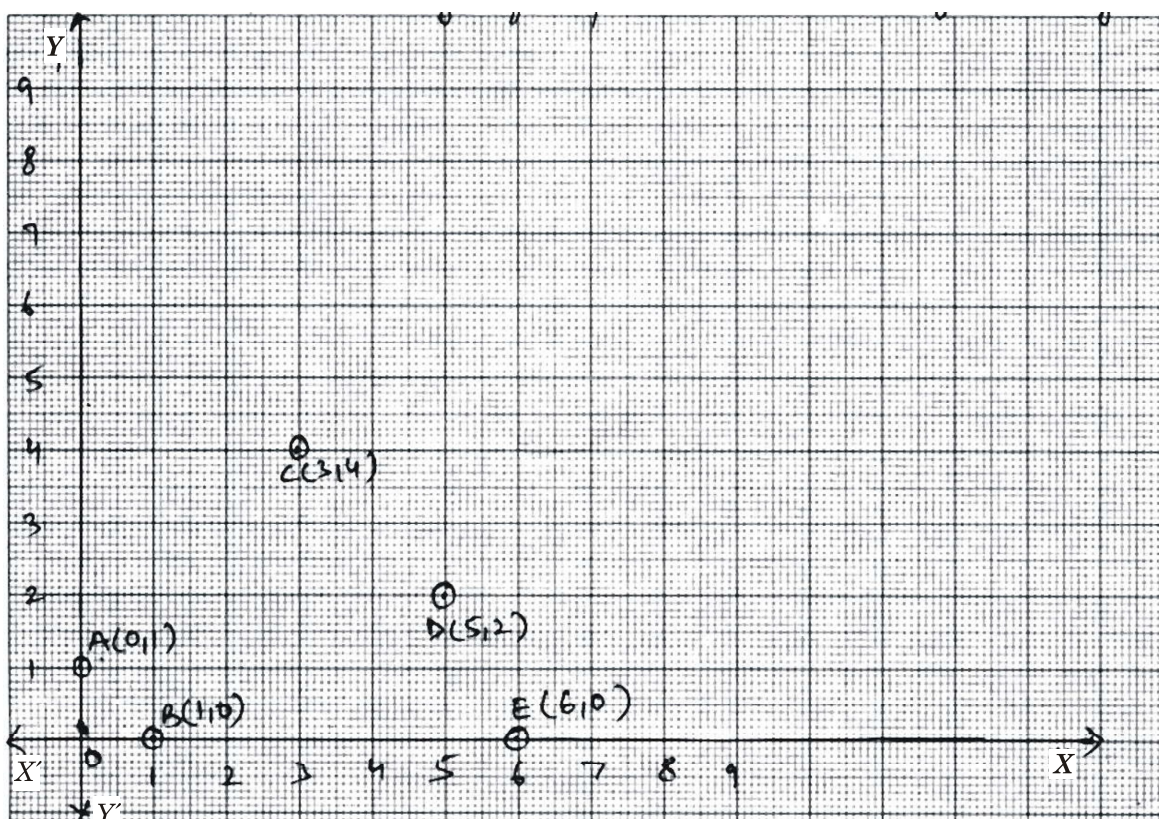
Using following graph, answer following question :



10. Which is the nearest point to the origin?

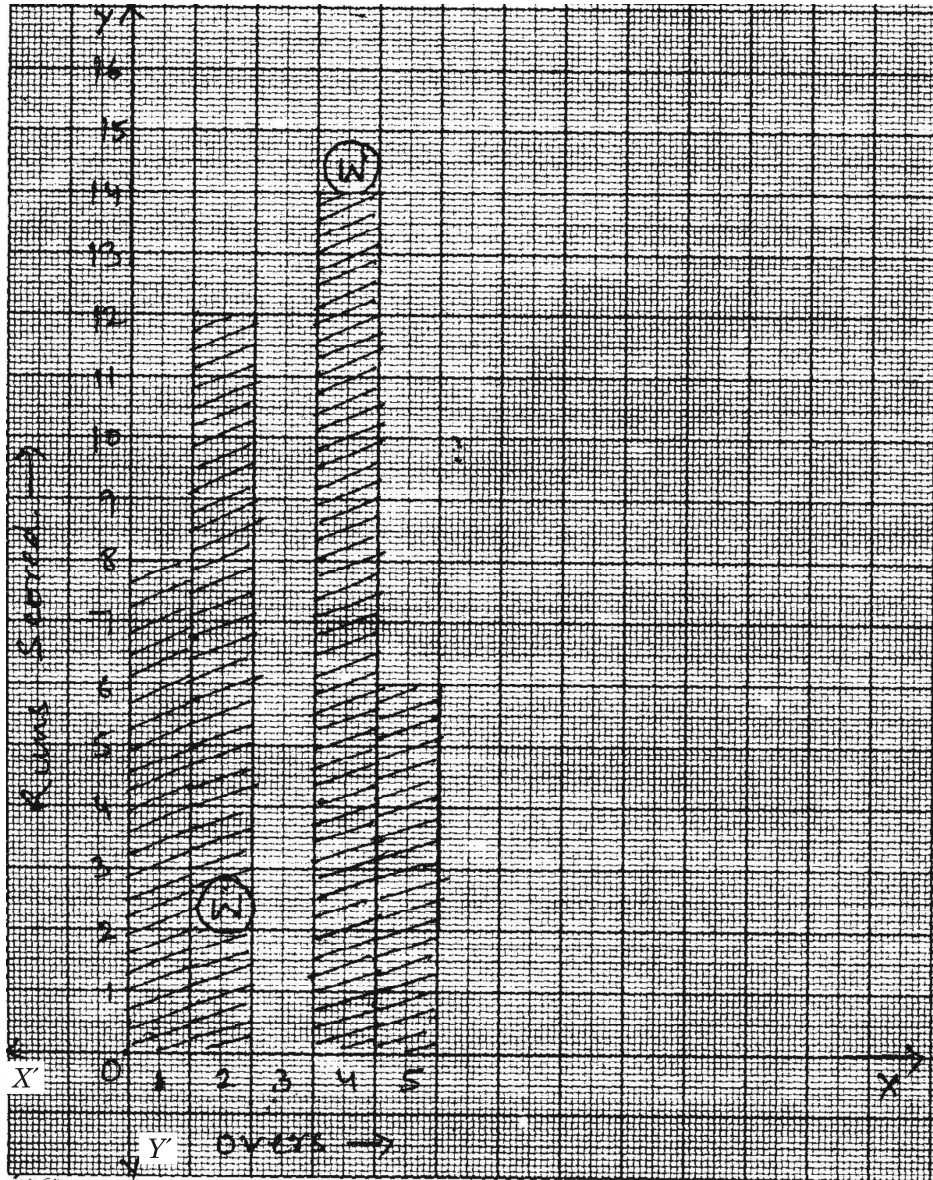
11. If a man covers 5 units right (due east) from point A , then find the co-ordinates of his new position.
12. A person moves 3 units upwards (due north) from point B , find the co-ordinates of new position.
13. A person moves 4 units right (due east) from point C and then moves 5 units upward (due north), find his new position.

Read the following graph and the following questions :



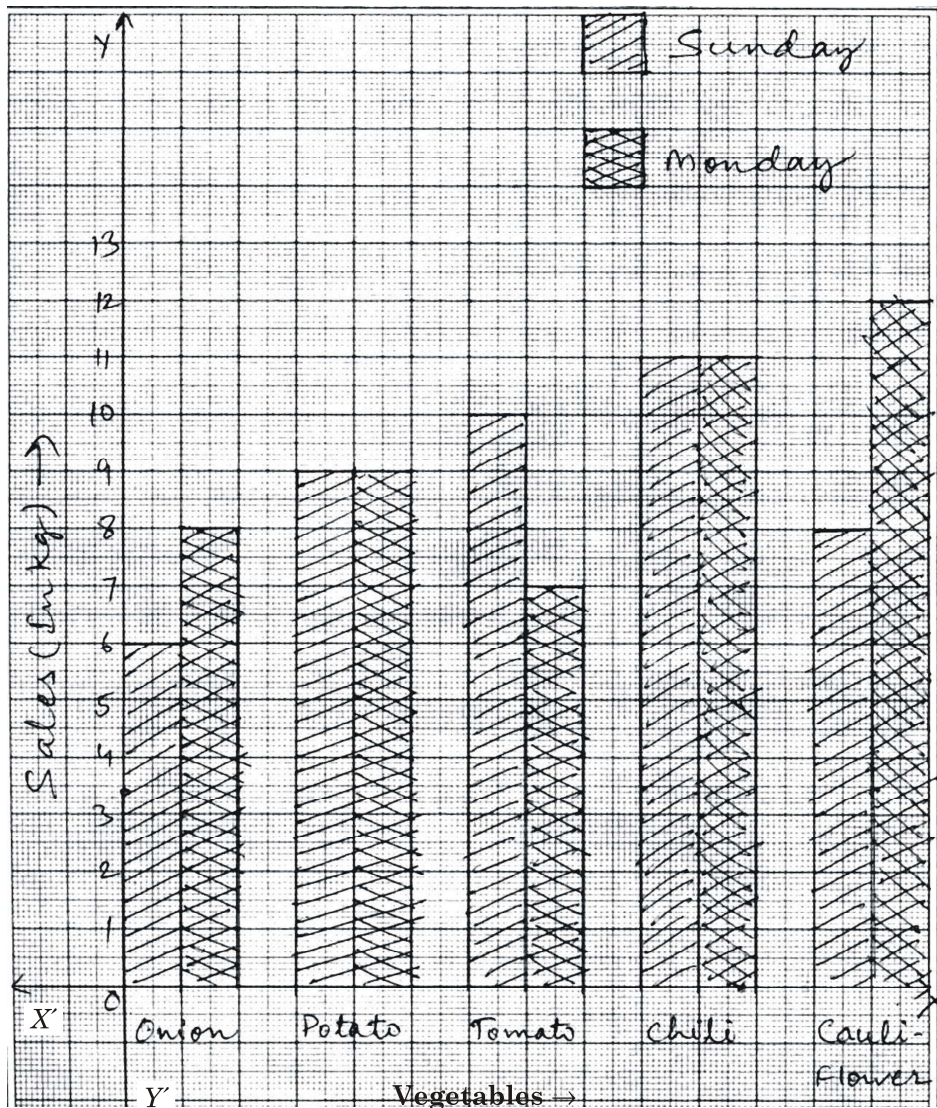
14. Name the point whose abscissa is same as ordinate of A and ordinate same as abscissa of A .
15. Find the point which is farthest from x -axis.
16. Find the point with one of its co-ordinates as zero and farthest from the origin.

The following graph shows analysis of first five overs of a team in a T-20 match. Study it and answer the following questions (17–21) :



17. When the first wicket was down, what was the score?
18. What was the score after 5 overs?
19. Which one was the only maiden (runless) over?
20. What was the run rate after 5 overs?
21. After how many overs, second wicket fell?

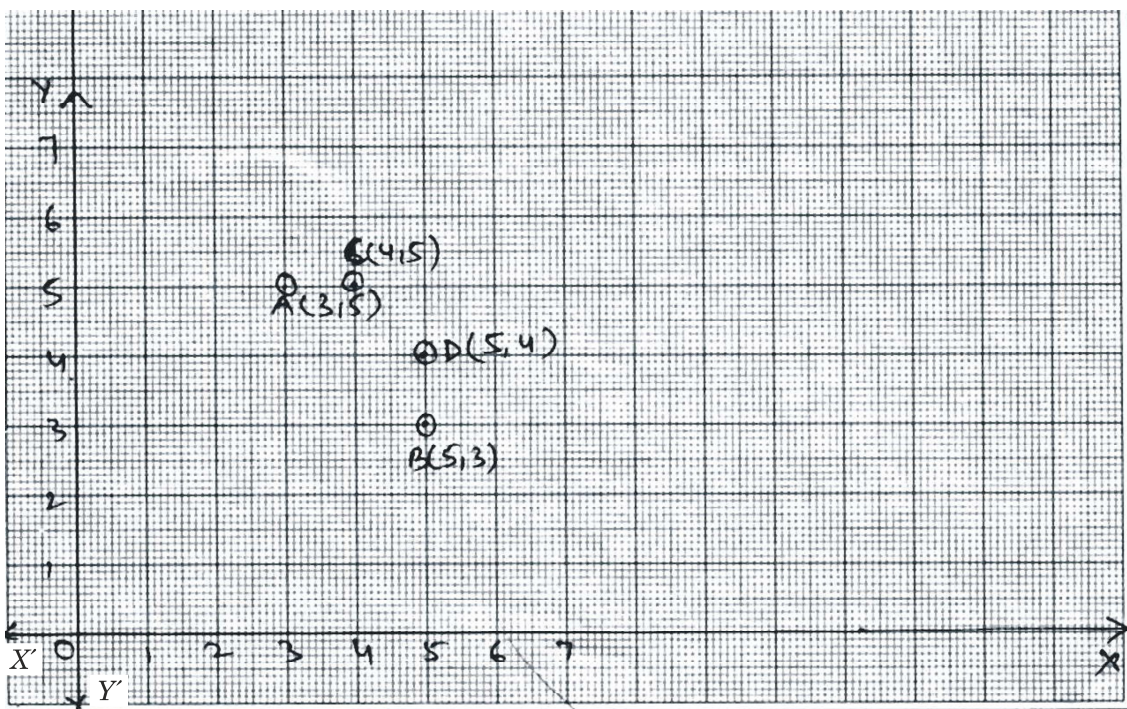
The following bar graph shows comparative sale of different vegetables of a store for two days. Study it and answer the questions that follows (22–26) :



22. Which vegetables experienced same amount of sale on both days?
23. Which vegetable experienced biggest decrease in consecutive days?
24. For which vegetable the increase is highest and what is the percent increase for this vegetable?
25. What is the lowest total sell in kg for any of the vegetables?
26. In terms of total sells of both days, which is the most demanded vegetable?
27. Which axis will be intersected by the extended line segment joining the points $A(2, 3)$ and $B(2, 5)$.

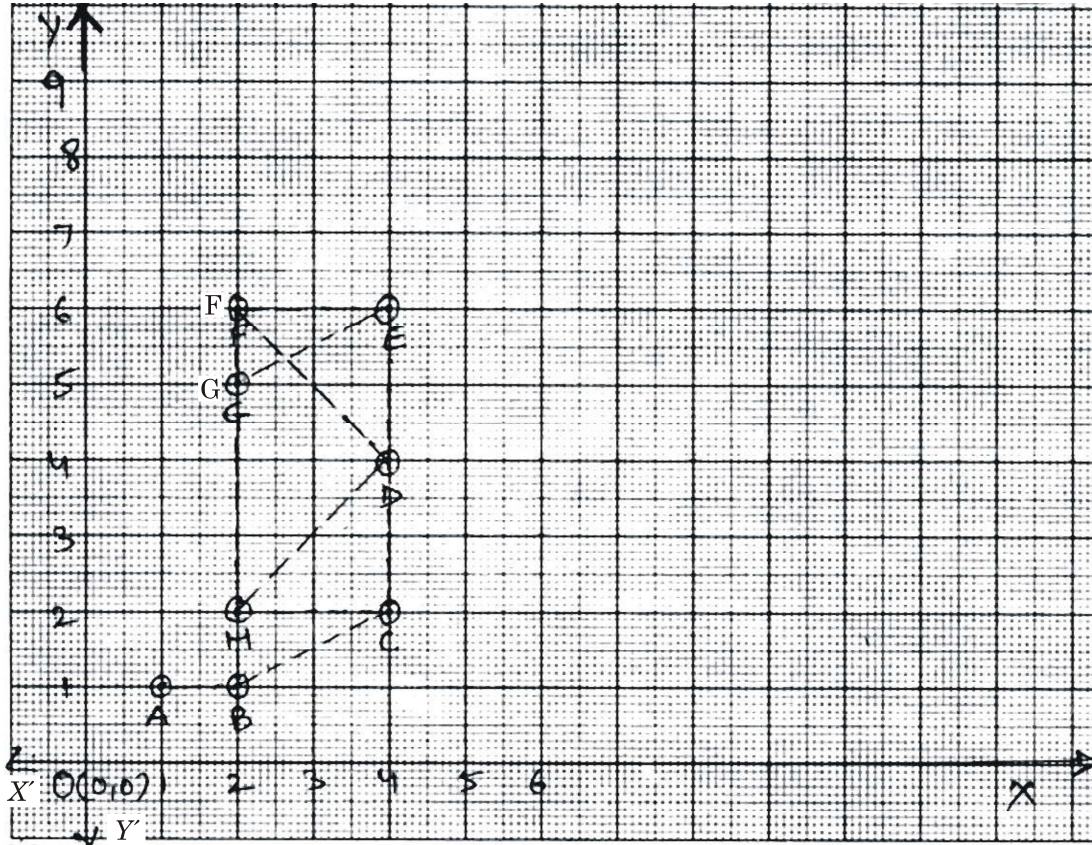
28. Two points $C(3, 3)$ and $D(5, 3)$ are joined and the line segment so obtained is extended in both the directions. Find the co-ordinates of the point of intersection this intended line segment and y -axis.

Study the following graph and answer the following questions (29–30) :



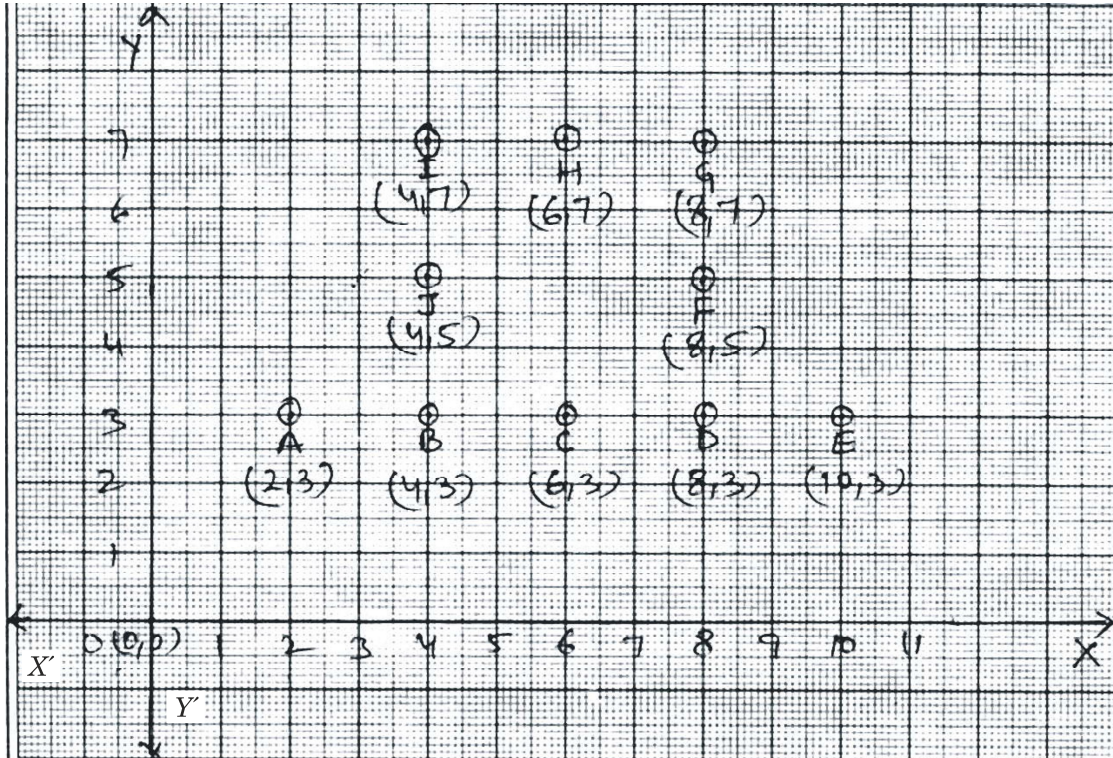
29. Find the co-ordinates of the point which if joined with point A , will give us a line segment parallel to x -axis.
30. Name the points whose joining will result in a line segment parallel to y -axis.

Read the following graph and answer the following questions (31–34) :



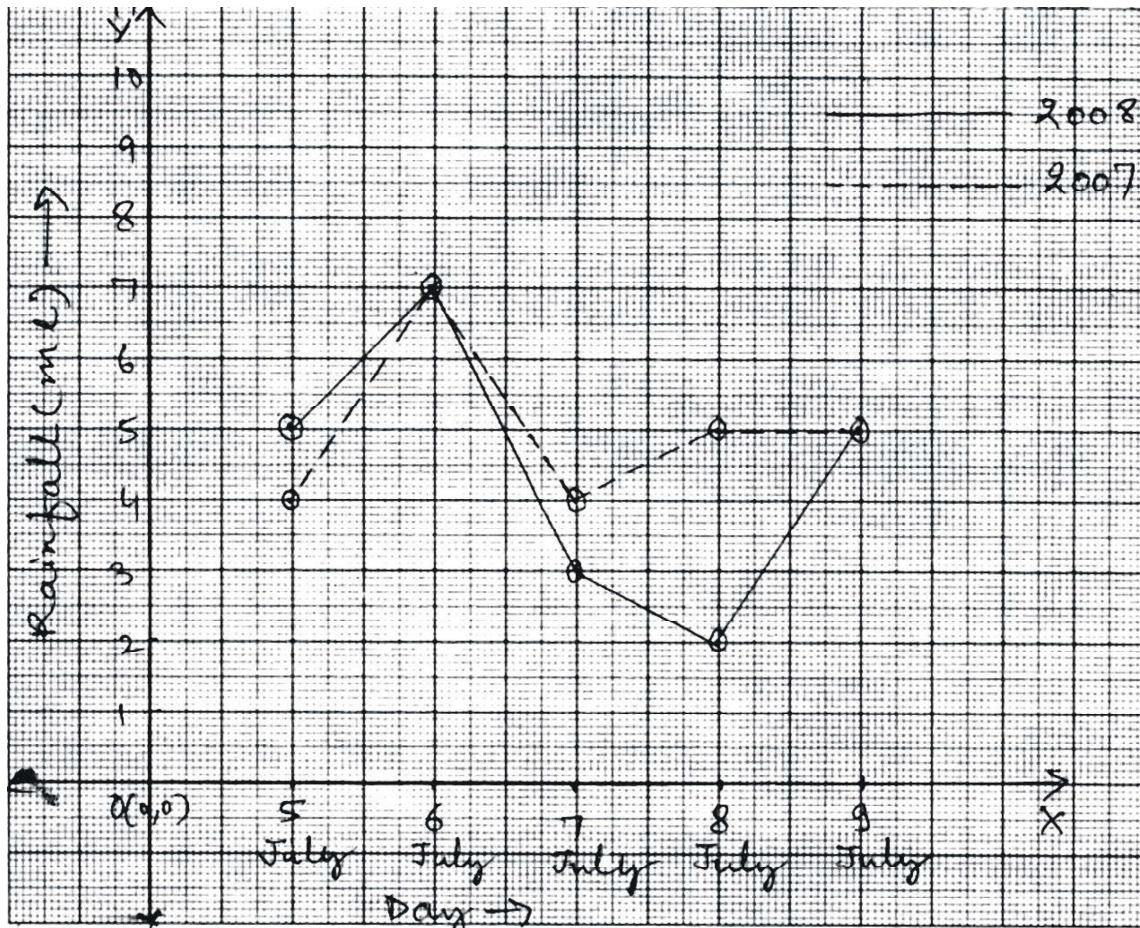
31. Identify the points and their co-ordinates which can form a parallelogram.
32. Name the points which can make an isosceles triangle.
33. Which are the points whose joining will give us a rectangle.
34. Identify the co-ordinates of the points whose joining will result in a line segment parallel to line segment HC .

Read the following graph and answer the following questions (35–37) :



35. Name the mid point of points D and G .
36. Find the co-ordinates of mid point of points I and G .
37. Find the co-ordinates of mid point of points A and E .

Study the following graph and answer the following questions (38–42) :



38. Which year experienced better overall rainfall for these five days?
39. On how many days the rainfall was same?
40. Name the only date on which 2008 got more rainfall?
41. On which date the difference between the rainfall of the two years was biggest?
42. If the average rainfall for a day is 4 ml, then in 2008 how many dates were there on which the rainfall was more than average?

ANSWERS

- | | |
|--|-------|
| 1. B | 2. C |
| 3. A | 4. 29 |
| 5. C | 6. B |
| 7. A(0, 0), C(0, 2), F(2, 2), D(2, 0). | |

- | | |
|--|---|
| 8. Independent variable – Quantity of water. | Dependent variable – cost of water. |
| 9. $A(1, 1), C(1, 4), E(3, 4), F(3, 1)$ | 10. B |
| 11. $(5, 2)$ | 12. $(1, 4)$ |
| 13. $(6, 5)$ | 14. B |
| 15. $C(3, 4)$ | 16. $E(6, 0)$ |
| 17. 10 Runs | 18. 40 Runs for 2 Wickets |
| 19. 3rd Over | 20. 8 Runs per over. |
| 21. After four overs | 22. Potato and chili |
| 23. tomato | 24. Cauliflower, 50% |
| 25. 14 kg for Onion | 26. Chili |
| 27. x -axis | 28. $(0, 3)$ |
| 29. $C(4, 5)$ | 30. $B(5, 3)$ and $D(5, 4)$ |
| 31. $B(2, 1), C(4, 2), E(4, 6), G(2, 5)$ | 32. Points H, D and F . |
| 33. Points H, C, E and F . | 34. $F(2, 6)$ and $E(4, 6)$ and $A(1, 1)$ and $B(2, 1)$ |
| 35. $F(8, 5)$ | 36. $(6, 7)$ |
| 37. $(6, 3)$ | 38. (2007) |
| 39. Two | 40. 5 July |
| 41. 8 July | 42. Three |