

Unit 12

1. b 2. d 3. b 4. c 5. c 6. a
 7. d 8. c 9. c 10. d 11. line graph
 12. graph 13. pair of 14. y -axis 15. x -axis y -axis
 16. plotting 17. x 18. x -axis 19. 2 20. zero
 21. 4 22. x -coordinate/abscissa 23. (5, 4)
 24. y -coordinate/ordinate 25. origin 26. True 27. True
 28. False 29. False 30. False 31. True 32. True 33. False
 34. True 35. (1) d, (2) f, (3) e, (4) a, (5) b, (6) c
 36. (a) ii (b) iii (c) i (d) v (e) vi (f) iv
 37. (a) F (2, 0) (b) A (0, 4) (c) H (5, 1) (d) C (2, 6) (e) E (3, 3)
 38. A (0, 7.5) B (4, 5) C (7.5, 2.5) D (11, 0) E (14.5, 6.5)
 F (18, 9.5)
 40. (a) (A, f) (b) (monkeys, elephants) (c) (o, e) (d) (c, c)
 41. (a) 7, (b) 5, 90 42. (a) 5 (b) 0 (c) 7
 43. (a) Yes (b) No, square (c) No, triangle
 44. x 1 2 3 4
 y 3 6 9 12 46. (a) Rs 70, (b) 5
 47. (a) Uniform speed.
 (b) Moves with uniform speed then comes to rest.
 (c) Moves with non-uniform speed then slowly comes to rest.

48. (a)

x	0	1	2	3
y	1	4	7	10

(b)

x	0	2	4	6
y	-1	1	3	5

49. (a)

x	0	1	2	3
y	0	1	2	3

(b)

x	0	1	2	3
y	2	4	6	8

50. (a) 264 unit **(b)** $r = 35$ unit

51. (a) Maximum temp. in $^{\circ}\text{C}$ in the two consecutive weeks.

(b) First week **(c)** Wednesday **(d)** Friday

(e) 1st week - 37°C , 2nd week - 33°C

(f) Sunday **(g)** Wednesday

52. (a) April **(b)** March **(c)** April **(d)** 250 **(e)** 125 **(f)** $2/3$

53. (a) Subjects marks obtained (out of 10) by Sania in two terms exams in class VIII.

(b) Maths **(c)** English & Maths

(d) English & Hindi **(e)** 6 **(f)** Same in boths **(g)** Test I Maths

54. (A) (1, 1) **E** (5, 1) **I** (4,4)

(B) (3, 0) **F** (6, 3) **J** (4, 5)

(C) (4, 2) **G** (5,5) **K** (3, 6)

(D) (2, 3) **H** (4, 3) **L** (2, 6)

(M) (1, 5) **O** (2, 4) **Q** (0, 5)

(N) (2, 5) **P** (1, 2)

55. (a) 10 am **(b)** 16 km **(c)** not travelling

(d) 40 km **(e)** 24 km **(f)** 2 pm

(g) 4 km/h, 0 km/h **(h)** 10 p.m.

56. (a) $p = 6$ **(b)** $q = 4$

57. (a) Maximum temp is 31°C in a week

(b) Sunday, 25°C **(c)** Wednesday

(d) Friday

58. (a) 240 km **(b)** 5 hours **(c)** 2 hours **(d)** 120 km

(e) Time and Distance graph

76.

x	1	2	3	4	5
y	1.25	5	10	15	20

77. (a) highest 1990, lowest 2000 (b) 1996 (c) 4.7%

78. (a) pattern 1 2 3 4 5 6
toothpicks 4 7 10 13 16 19

(b) graph (c) pattern $y = 3x + 1$

(d)

x	7	8
y	22	25

(e) Yes

79. (a) $y = 3x - 1$

(b)

x	3	8
y	8	23

80. 1. Water, No 2. No. C (7, 5) D (5, 7) 3. (2, 7)
4. (6, 11) 5. (7, 3) (5, 5) 6. (7.5, 3) 2 km
7. (8.5, 3) 8. (6.25, 3)
9. (9, 4) (10, 4) (11, 5) 10. (7, 8) (8, 8) (9, 8) 11. (5, 3) (6, 2) (7, 2)

81. a) Makes it easy to understand the temp. change
b) Temp. increases up to 1:00 p.m. and then decreases
c) at 12 pm 19°C., at 8 pm 10°C.

82. a) E and F b) D c) B and F, C and E
d) C, D, E e) Yes f) A g) A and C

83. (a) Height and Weight
(b) D - Ostrich B - Donkey A - Crocodile C - Dog

84. a) True b) True c) True
d) True e) False

85. Side length of purple S 1 2 3 4 5 10 100

White Tiles b 4 8 12 16 20 40 400

(c) $b = 45$

86. Rows r 4 6 8

White Tiles 9 15 21

Purple Tiles 1 6 15

Activity

- | | | |
|----------------|----------------|-----------------|
| 1. Bar graph | 2. y -axis | 3. Linear graph |
| 4. Origin | 5. Coordinates | 6. Right |
| 7. Abcissa | 8. Axes | 9. Graph |
| 10. Cartesia | 11. Line | 12. Ordinate |
| 13. Whole | 14. Histogram | 15. Gaps |
| 16. Horizontal | 17. x -axis | |