1. The distance of the point P(2, 3) from the x-axis is
(a) 2
(b) 3
(c) 1
(d) 5

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2. The distance between the point P(1, 4) and Q(4, 0) is
(a) 4
(b) 5
(c) 6
(d) 3âˆš3

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3. The points (-5, 1), (1, p) and (4, -2) are collinear if
the value of p is
(a) 3
(b) 2
(c) 1
(d) -1

---

4. The area of the triangle ABC with the vertices A(-5, 7), B(-4, -5) and C(4, 5) is
(a) 63
(b) 35
(c) 53
(d) 36

---

5. The distance of the point (Î±, Î²) from the origin is
(a) Î± + Î²
(b) Î±Â² + Î²Â²
(c) |Î±| + |Î²|
(d) $\sqrt{\alpha^2 + \beta^2}$

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6. The area of the triangle whose vertices are A(1, 2), B(-2, 3) and C(-3, -4) is
(a) 11
(b) 22
(c) 33
(d) 21

---

7. If the distance between the points (x, -1) and (3, 2) is 5, then the value of x is
(a) -7 or -1
(b) -7 or 1
(c) 7 or 1
(d) 7 or -1

---

8. The area of the triangle formed by the points A(-1.5, 3), B(6, -2) and C(-3, 4) is
(a) 0
(b) 1
(c) 2
(d) 3/2

---

9. If the points P(1, 2), B(0, 0) and C(a, b) are collinear, then
(a) 2a = b
(b) a = -b
(c) a = 2b
(d) a = b

---

10. If the segment joining the points (a, b) and (c, d) subtends a right angle at the origin, then
(a) ac - bd = 0
(b) ac + bd = 0
(c) ab + cd = 0
(d) ab - cd= 0

---

1. The distance of a point from the y axis is called its ————

A. Ordinate
B. Abscissa
C. Origin

2. The distance of a point from the x axis is called its ————

A. Ordinate
B. Abscissa
C. Origin

3. The coordinates of a point on the x axis are of the form ————

A. (0, x)
B. (x, 0)
C. (y, 0)

4. The coordinates of a point on the y axis are of the form————–

A. (0, y)
B. (y, 0)
C. (x, 0)

5. A linear equation in two variables of the form ax + by + c = 0, when represented graphically gives a ———————

A. Parabola
B. Circle
C. Straight line

6. The graph of a quadratic equation is a ———————

A. Parabola
B. Circle
C. Straight line

7. The relation between x and y such that the point (x, y) is equidistant from the points (7, 1) and (3, 5) is ———————–

A. x + y =2
B. x – y = 2
C. y – x = 2

8. The area of a triangle whose vertices are (1, -1) (-4, 6) and (-3, -5) is ————-

A. 20
B. 22
C. 24

9. The value of k if the points A (2, 3), B (4, k) and C (6, -3) are collinear is ———————-

A. 0
B. 2
C. 4

10. The distance between the points A (1, 1) and B (9, 7) is ————-

A. 8
B. 9
C. 10

11. The points (1, 7) (4, 2) (-1, -1) and (-4, 4) are the vertices of a ————–

A. Rectangle
B. Square
C. Parallelogram

12. The points (5, -2) (6, 4) and (7, -2) are the vertices of an ————– triangle.

A. Scalene
B. Equilateral
C. Isosceles

13. The distance of a point P (4, 3) from the origin (0, 0) is given by ————–

A. 3
B. 4
C. 5

14. The points (3, 2) (-2, -3) and (2, 3) form a ———— triangle.

A. Acute angle
B. Right angle
C. Obtuse angle

15. A point on the y axis which is equidistant from the points A (6, 5) and

B (-4, 3) is ————-
A. y = 8
B. y = 9

C. y = 10

ANSWERS:

1. Abscissa
2. Ordinate
3. (x, 0)
4. (0, y)
5. Straight line
6. Parabola
7. x – y =2 (Use distance formula)
8. 24. (Use the formula for Area)
9. k = 0
Since the given points are collinear the area of the triangle formed by them must be zero.
½ [2(k +3) + 4(-3-3) + 6(3 –k)] = 0
½ [-4k] = 0
k = 0
10. 10 (Use distance formula)
11. Square
Let A (1, 7), B (4, 2) C (-1, 1) and D (-4, 4) be the given points. Using distance formula, find the length of the sides AB, BC, CD, AD and diagonals AC and BD.
All the four sides of the quadrilateral ABCD are equal and its diagonal AC and BD are also equal. Therefore, ABCD is a square.
12. Isosceles triangle
13. 5
14. Right triangle
15. y = 9
A point on the y axis is of the form (0, y). So let the point P (0, y) is equidistant from A and B. Then find the distance between (0, y), (6, 5) and (0, y), (-4, 3) then equate.

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1. Point A(–5, 6) is at a distance of:

(a) 61 units from the origin (b) 11 units from the origin

(c) √61 units from the origin (d) √11 units from the origin

2. If the points (1, x), (5, 2) and (9, 5) are collinear then the value of x is

(a) 5/2 (b) -5/2 (c) –1 (d) 1

3. The end points of diameter of circle are (2, 4) and (–3, –1). The radius of the circle us

(a) $\frac{5\sqrt{2}}{2}$ (b) $5\sqrt{2}$ (c) $3\sqrt{2}$ (d) $\frac{\pm 5\sqrt{2}}{2}$

4. The ratio in which x – axis divides the line segment joining the points (5, 4) and (2, –3) is:

(a) 5 : 2 (b) 3 : 4 (c) 2 : 5 (d) 4 : 3

5. The point which divides the line segment joining the points (7, –6) and (3, 4) in ratio 1:2 internally lies in the

(a) I quadrant (b) II quadrant (c) III quadrant (d) IV quadrant

6. The point which lies on the perpendicular bisector of the line segment joining the points A(–2, – 5) and B(2, 5) is:

(a) (0, 0) (b) (0, 2) (c) (2, 0) (d) (–2, 0)

7. The fourth vertex D of a parallelogram ABCD whose three vertices are A(-2, 3), B(6, 7) and C(8,3) is:

(a) (0, 1) (b) (0, -1) (c) (-1, 0) (d) (1, 0)

8. If the point P(2, 1) lies on the line segment joining points A(4, 2) and B(8, 4), then

(a) $AP = \frac{1}{3}AB$ (b) $AP = PB$ (c) $PB = \frac{1}{3}AB$ (d) $AP = \frac{1}{2}AB$

9. Three vertices of a parallelogram taken in order are (- 1, - 6), (2, - 5) and (7, 2). The fourth vertex is

(a) (1, 4) (b) (1, 1) (c) (4, 4) (d) (4, 1)

10. If A and B are the points (- 3, 4) and (2,1) respectively, then the coordinates of the points on AB produced such that AC = 2BC are

(a) (2, 4) (b) (3, 7) (c) (7, –2) (d) none of these

11. Distance of the point (4, a) from x-axis is half its distance from y-axis then a =

(a) 2 (b) 8 (c) 4 (d) 6

12. A triangle is formed by the points 0(0, 0), A(5,0) and B(0,5). The number of points having integral coordinates (both x and y) and strictly inside the triangle is

(a) 10 (b) 17 (c) 16 (d) 6

13. If P(l, 2), Q(4,6), R(5,7) and S(a, b) are the vertices of a parallelogram PQRS then
(a) a = 2, b = 4 (b) a = 3, b = 4 (c) a = 2, b = 3 (d) a = 3, b = 5

14. The number of points on x-axis which are at a distance of 2 units from (2, 4) is
(a) 2 (b) 1 (c) 3 (d) 0

15. The distance of the point (h, k) from x-axis is
(a) h (b) k (c) | h | (d) | k |

16. The vertices of a triangle are (0, 0), (3, 0) and (0, 4). Its orthocentre is at
(a) (0, 3) (b) (4, 0) (c) (0, 0) (d) (3, 4)

17. The area of the triangle with vertices at the points (a, b + c), (b, c + a) and (c, a + b) is
(a) a + b + c (b) a + b – c (c) a – b + c (d) 0

18. If the segment joining the points (a, b) and (c, d) subtends a right angle at the origin, then
(a) ac – bd = 0 (b) ac + bd = 0 (c) ab – cd = 0 (d) ab + cd = 0

19. The distance of A(5, -12) from the origin is
(a) 12 (b) 11 (c) 13 (d) 10

20. Find the ordinate of a point whose abscissa is 10 and which is at a distance of 10 units from the point P(2, -3).
(a) 3 (b) –9 (c) both (a) or (b) (d) none of these