VIDYA BHARATI SCHOOL

OLYMPIAD WORKSHEET: OCT- 2017

GRADE: IX

SUBJECT: MATHEMATICS

Write the correct answer in each of the following:

1. X=0 is the equation of

   a) X-axis b) y-axis c) a line parallel to x-axis d) a line parallel to y-axis

2. Y=0 is the equation of

   a) X-axis b) y-axis c) a line parallel to x-axis d) a line parallel to y-axis

3. X+3=0 is the equation of a line

   a) Parallel to x-axis and passing through (-3,0) b) parallel to y-axis and passing through (-3,0)

   b) Parallel to y-axis and passing through (0,-3) d) none of these

4. Y-4= 0 is the equation of a line

   a) Parallel to x-axis and passing through (4,0) b) parallel to x-axis and passing through (0,4)

   c) Parallel to y-axis and passing through (0,4) d) none of these

5. The point of the form (a,a) where a≠0 lies on

   a) x-axis b) y-axis c) the line x=y d) the line x+y =0

6. The point of the form (a,-a) where a≠0 lies on

   a) x-axis b) y-axis c) the line x-y=0 d) the line x+y=0

7. The linear equation 3x-5y=15 has

   a) a unique solution b) two solutions c) infinitely many solutions d) no solution

8. The graph of the linear equation 3x+2y=6 cuts the y-axis at the point

   a) (2,0) b) (0,2) c) (0,3) d) (3,0)

9. The graph of the linear equation 4x+3y=12 cuts the x-axis at the point

   a) (4,0) b) (0,4) c) (0,3) d) (3,0)

10. The graph of the line x=3 pass through the point

    a) (0,3) b) (2,3) c) (3,2) d) none of these

11. The graph of the line y=-3 does not pass through the point

    a) (2,-3) b) (3,-3) c) (0,-3) d) (-3,2)

12. The graph of the line y=2 passes through the point

    a) (2,0) b) (2,3) c) (5,2) d) none of these

13. A linear equation in two variables x and y is of the form ax+by+c=0, where

    a) a≠ 0, b≠0 b) a≠ 0, b=0 c) a= 0, b≠0 d) a= 0, c=0

14. Any point on x-axis is of the form:

    a) (x,y) where x≠0 and y≠0 b) (0,y), where y≠0

    b) (x,0) where x≠0 d) (y,y), where y≠0

15. Any point on y-axis is of the form:

    a) (x,0) where x≠0 b) (0,y) where y≠0

    b) (x,x) where x≠0 d) none of these

16. How many linear equations in x and y can be satisfied by x=2, y=3?

    a) Only one b) only two c) infinitely many d) none of these

17. The graph of the linear equation 2x+5y=10 is the line which meets the y-axis at the point

    a) (0,2) b) (5,0) c) (1/2,2) d) (2,1.2)

18. The graph of the linear equation 3x+2y=6 is the line which meets the x-axis at the point

    a) (0,3) b) (2,0) c) (2,3) d) (3,2)

19. If each of (-2,2), (0,0) and (2,-2) is a solution of a linear equation in x and y, then the equation is

    a) x-y=0 b) x+y=0 c) -2x+y=0 d) –x+2y=0

20. The graph of the linear equation x-y=0 passes through the point

    a) (-1/2,1/2) b) (3/2,-3/2) c) (0,-1) d) (1,1)