Chapter – 11

Algebra

Worksheet – 1

1. Express perimeter of a regular pentagon through a variable equation? (Take n as the variable)
   a. 2n
   b. 3n
   c. 5n
   d. 6n

2. Express perimeter of a square in the form of a variable equation? (Take L as the variable)
   a. 2L
   b. 3L
   c. 4L
   d. 6L

3. Express perimeter of a rectangle in the form of a variable equation? (take l and b as length and breadth)
   a. $(l + b)$
   b. $2(l + b)$
   c. $3(l + b)$
   d. $4(l + b)$

4. 6 more than a number can be written as:
   a. $x + 5$
   b. $x + 6$
   c. $x + 7$
   d. $x + 8$

5. 5 added to a number is equal to 8. Write an equation expressing the relation?
   a. $x + 5 = 8$
   b. $x - 5 = 8$
   c. $x - 5 = -8$
   d. $x + 5 = -8$

6. Abhinav is making a drawing by joining dots. He has 9 dots in a row. How many dots will his drawing have for 'p' rows?
   a. $9 + p$

b. 99

c. $9 - p$

d. 9P

7. Which of the following is expression with one variable?

   a. $(x + y + z)$

   b. $(y + 1)$

   c. 1

   d. $(x + y - 5)$

8. The length of a rectangular room is 5 meters less than 2 times the breadth of the wall. What is the length if breadth is b meters?

   a. 10b

   b. $2b + 5$

   c. $2b - 5$

   d. None of the above

9. Express perimeter of a regular hexagon through a variable equation? (Take n as the variable)

   e. 2n

   f. 3n

   g. 5n

   h. 6n

10. A teacher distributes 6 sweets to each of her students in the class. If there are 's' number of students in the class, then how many sweets are required?

    a. $6 - s$

    b. $6 + s$

    c. 6s

    d. 6/s

11. Think of a number. Multiply it by 5 and add 6 to the product and subtract y subsequently. Find the resulting number?

12. Identify the terms of the algebraic expression: $6ab^2 + 4c^2 - 4ab + 9$?

13. Write algebraic expression for "8 times number x is less than variable y"?

14. If the side of an equilateral triangle is y, then find its perimeter?

15. If $x = 4$, then find the value of the following:

    a. $3x + 5$

    b. 6x

    c. $4x - 8$

d. $2(x + 7)$

16. If $x = 4$ and $y = 5$, then find the value of the following:
    a. $X + y + 6$
    b. $X + y - 7$
    c. $X - y + 8$
    d. $X - y - 2$

17. If $\frac{5}{7} x = 20$, then find the value of x?

18. Check whether $3x - 5 = 4x - 9$ is correct for which value of x?

19. For which value of x, the equation $4x - 19$ is equal to 1?

20. For which value of x, the equation $5x - 20$ is equal to 20?