

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:
- $X + y + 6$
  - $X + y - 7$
  - $X - y + 8$
  - $X - y - 2$
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?

