Chapter – 11

Algebra

Worksheet – 3

1. One-fourth of a number x added to the number itself can be expressed as: -
   a. $X + \frac{1}{4}$
   b. $X + \frac{1}{4}x$
   c. $\frac{1}{4}x - x$
   d. $X - 4$
2. 7 less than a number equal to 8. What is the number?
   a. 12
   b. 13
   c. 14
   d. 15
3. 5 subtracted from 6 times a number can be expressed as _____. (taking number as n)
   a. $6n - 5$
   b. $7n - 1$
   c. $8n - 2$
   d. $5n - 4$
4. 6 added to 14 times a number can be expressed as _____. (Taking number as y)
   a. $14y + 6$
   b. $15y + 7$
   c. $14y + 8$
   d. $15y + 6$
5. 7 times a number x multiplied with number y can be written as _____.
   a. $7(x + y)$
   b. $7xy$
   c. $7x + y$
   d. $Y - 7x$
6. Six times of a negative number can be expressed as ____
   a. $7x$
   b. $- 6x$

c. $-8x$
d. $7x$

7. Five times of the difference between two numbers can be expressed as –
   a. $6(x - y)$
   b. $7(x - y)$
   c. $5(x - y)$
   d. $8(x - y)$
8. Six less than a number is equal to 5 less than another number. Express it in the form of an equation?
   a. $x - y = -6$
   b. $x - y = 1$
   c. $x - y = -8$
   d. $x - y = -10$

9. Twice the sum of number y and 14 can be written as _____.

   a. $2 (y - 14)$

   b. $2 (y + 14)$

   c. $2 (y - 14)$

   d. $2 (14y)$

10. One-fourth of number x added to one-third of number y can be expressed as ____.

   a. $\frac{1}{4}x + \frac{1}{3}y$

   b. $\frac{1}{4}x - \frac{1}{3}y$

   c. $-\frac{1}{4}x - \frac{1}{3}y$

   d. $-(\frac{1}{4}x - \frac{1}{3}y)$

11. If the side of a regular hexagon is x, then find its perimeter?

12. Write algebraic expression for "9 times the number x is less than the sum of 6 and variable y"?

13. Find the sum of $2(x + 9)$ and $3(y + 11)$, if $x = 5$ and $y = 4$ respectively?

14. Find the difference between $8(x + 2)$ and $5(y + 2)$, if $x = 6$ and $y = 3$ respectively?

15. If $x = 9$, then find the value of the following:

a. $4x + 10$
b. $8x$
c. $2x – 5$
d. $3(x – 2)$

16. If $x = 8$ and $y = 5$, then find the value of the following:

a. $X + y + 4$
b. $X + y – 2$
c. $X – y + 4$
d. $X – y – 7$

17. What will be the product of $5xy$ and $7yz$ if values of $x = 2$, $y = 3$, $z = 5$ respectively?

18. If $\frac{6}{8} x = 48$, then find the value of x?

19. Check whether $15x – 10 = 16x – 12$ is correct for which value of x?

20. Find the value of $6(xy + yz + zx)$ if $x = 5$, $y = 4$ and $z = 3$ respectively?