

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?