

Grade 6 Algebra Worksheets

Grade 6 Maths Algebra Multiple Choice Questions (MCQs)

1. Number of matchsticks required to make a pattern of “T”:

- (a) 5
- (b) 2
- (c) 3
- (d) 4

2. Number of matchsticks required to make a pattern of “U”:

- (a) 5
- (b) 2
- (c) 3
- (d) 4

3. Number of matchsticks required to make a pattern of “Z”:

- (a) 5
- (b) 2
- (c) 3
- (d) 4

4. Number of matchsticks required to make a pattern of “A”:

- (a) 5
- (b) 6
- (c) 3
- (d) 4

5. Perimeter of the square, whose each side is ‘n’ cm is:

- (a) $n + 4$
- (b) $4n$
- (c) $n - 4$
- (d) $\frac{n}{4}$

6. Perimeter of an equilateral triangle, whose each side is ‘X’ unit is:

- (a) $3x$
- (b) $3 - x$
- (c) $\frac{3}{x}$
- (d) $3 + x$

7. Diameter of circle whose radius is ‘r’ is:

- (a) $\frac{r}{2}$
- (b) $2r$
- (c) $2 - r$
- (d) $2 + r$

8. $x + y = y + x$ is

- (a) Commutative property
- (b) Associative property

(c) Closure property

(d) Distributive property

9. **How many variables are used in the expression $2x + 3y + 5$?**

(a) 1

(b) 2

(c) 3

(d) 5

10. **The expression for the statement: “y multiplied by 10 and then 7 added to product”.**

(a) $10 + y + 7$

(b) $7y + 10$

(c) $10y + 7$

(d) $10y$

11. **What is the statement for the expression $2y - 9$?**

(a) $2y$ subtracted from 9

(b) 9 subtracted from $2y$

(c) 9 subtracted from 9

(d) thrice of y minus 9

12. **$p = 3$ is a solution of equation:**

(a) $2p + 5 = 17$

(b) $5p + 2 = 17$

(c) $2p + 17 = 5$

(d) $5p + 17 = 2$

13. **The equation for the statement: one fourth of a number minus 4 gives 4.**

(a) $4x - 4 = 4$

(b) $\frac{4}{x} - 4 = 4$

(c) $\frac{1}{4}x - 4 = 4$

(d) $x - 4 = \frac{1}{4}$

14. **$a \times (b + c) = a \times b + a \times c$ is**

(a) Commutative property under addition

(b) Associative property under multiplication

(c) Distributive property of multiplication over addition

(d) Closure property

15. **Which of the following is an equation?**

(a) $x - 3 > 0$

(b) $x + 3 < 0$

(c) x

(d) $x + 3 = 0$

16. **The value of variable in the expression is:**

(a) fixed

(b) not fixed

(c) zero

(d) one

17. **The value of $p - q + pq$ for $p = -1$, $q = -2$ is:**

(a) 0

(b) 1

(c) -5

(d) 3

18. Write the statements “If you subtract 5 from 6 times a number, you get 7.” in the form of equations:

(a) $6x - 5 = 7$

(b) $5x - 6 = 7$

(c) $x - 5 = 7$

(d) $x - 6 = 7$

19. Which is a solution of the equation $3x - 14 = 4$?

(a) $x = 2$

(b) x

(c) $x = 4$

(d) $x = 6$

20. Write the statements “If you take away 6 from 6 times a number, you get 60” in the form of equations:

(a) $6x + 6 = 60$

(b) $6x - 6 = 60$

(c) $x - 6 = 60$

(d) none of these

Class 6 Maths Algebra Fill In The Blanks

1. The distance (in km) travelled in h hours at a constant speed of 40km per hour is

2. ‘ x ’ exceeds y by 7 can be expressed as

3. The number of days in w weeks is

4. r rupees = paise.

5. If $7x + 4 = 25$, then the value of x is

Class 6 Maths Algebra Very Short Answer Type Questions

1. The price of 1 pen is ₹ 15 and price of 1 pencil is ₹ 5. Write an expression for the total amount payable for buying x pens and y pencils.

2. The side of a square is x . Express the perimeter of the square using x .

3. If the radius of circle is denoted by r , express its diameter in terms of r .

4. Express the associative property of addition of whole numbers using the variables x , y and z .

5. Give an expression for each of the following:

(a) The sum of b and 9

(b) Subtract 4 from x

(c) Multiply 5 by y

(d) 3 more than four times a number y .

(e) One-fifth of x added to the sum of a and b .

6. If $x = 3$, evaluate

(a) $2x = \dots\dots\dots$

(b) $2x + 3 = \dots\dots\dots$

(c) $3x - 2 = \dots\dots\dots$

7. If $x = 3$, $y = -1$, evaluate

(a) $2x + y = \dots\dots\dots$

(b) $3x - y = \dots\dots\dots$

(c) $3x + 2y = \dots\dots\dots$

Class 6 Maths Algebra Short Answer Type Questions

1. Complete the table and by inspection find the solution to the respective equations:

(a) $m + 6 = 10$

m	1	2	3	4	5	6	7	8	9
m+6									

(b) $2m - 5 = -1$

m	1	2	3	-2
2m-5				

2. One fourth of a number is 8. Find the number.

3. Three times a number is 21. Find the number.

4. Which of the following are equations?

(a) $2x + 7 > 3x$

(b) $3m < 15$

(c) $5x + 2 = 12$

(d) $z + 13 < 16$

Class 6 Maths Algebra Long Answer Type Questions

1. Pick out the solution from the values given in the bracket.

(a) $p + 12 = 17$ (2, 5, 6, 8)

(b) $\frac{p}{7} = 2$ (10, 11, 13, 14)

(c) $r - 5 = 3$ (2, 8, 7, 5)

2. Mother has made laddus. She gives some laddus to guests and family members; still 5 laddus remain. If the number of laddus mother gave away is 1, how many laddus did she make?

3. A bus travels at v km per hour. It is going from Daspur to Beespur. After the bus has travelled 5 hours, Beespur is still 20 km away. What is the distance from Daspur to Beespur? Express it using v .