

Class: 7
Subject: Mathematics
Topic: Algebraic Expression
No. of Questions: 20
Duration: 60 Min
Maximum Marks: 60

1. What are the coefficients of x in the expression $-8x + y$?

- A. 8
- B. -1
- C. -8
- D. 1

Sol: C

2. What are the coefficients of y in the expression $4x - 3y$?

- A. 4
- B. 3
- C. -3
- D. -4

Sol: C

3. What are the coefficients of y in the expression $yz^2 + 5$?

- A. 5
- B. 1
- C. z^2
- D. z

Sol: B

4. Write an expression: Raju's father's age is 5 years more than 3 times Raju's age. If Raju's age is x years, then father's age is

- A. $3x + 5$
- B. $3x - 5$
- C. $5 - 3x$
- D. $3x + 7$

Sol: A

Raju's age is x , 3 times Raju's age will be $3x$ and 5 more than 3 times is $3x+5$

5. The number of terms in $4p^2q - 3pq^2 + 5$ is

- A. 5
- B. 1
- C. 7
- D. 3

Sol: D

(As there are 3 unlike terms)

6. The expression for sum of numbers a and b subtracted from their product is

- A. $ab - a - b$
- B. $a + b - ab$
- C. $ab - (a + b)$
- D. $ab - a + b$

Sol: A

7. The sum of $mn + 5 - 2$ and $mn+3$ is

- A. $2mn + 6$
- B. $mn + 6$
- C. $mn - 6$
- D. $2mn - 6$

Sol: A

8. Two equations upon simplification are $mn+3$ and $mn+3$ so their addition will be $2mn + 6$)

The constant term in the expression $1 + x^2 + x$ is

- A. x^2
- B. 1
- C. x
- D. None of these

Sol: B

9. The constant term is the one which is independent of x , so it's the first term 1.

Find the value of $x + 4$ for $x = 2$.

- A. 4
- B. 8
- C. None of these
- D. 6

Sol: D ($X = 2$, SO $X + 4$ WILL BECOME $2 + 4 = 6$)

10. The value of $21b - 32 + 7b - 20b$ is

- A. $8b$
- B. -32
- C. None of these
- D. $8b - 32$

Sol: D (Calculating variable terms and constant terms separately well get $8b-32$)

11. Subtracting $-5y^2$ from y^2 , the result is

- A. $5y^2$
- B. $6y^2$
- C. $-6y^2$
- D. y^2

Sol: B

$(y^2 - (-5y^2)) = 6y^2$

12. The value of expression $5n - 2$, when $n = -2$ is

- A. 10
- B. -12
- C. None of these
- D. 12

Sol: B

$$5(-2) - 2 = -12$$

13. When $x = 0$, $y = -1$, then the value of expression $2x + 2y$ is

- A. -2
- B. 2
- C. 0
- D. 1

Sol: A

$$2*0 + 2*(-1) = -2$$

14. Factors of the term $15x^2$ in the expression $15x^2 - 13x$ are

- A. 15, -13
- B. 15, x, x
- C. 15x, -13
- D. 3, x

Sol: B

15. Find the product of $(3x - 5y)(3x - 5y)$.

- A. $9x^2 + 25y^2 - 25xy$
- B. $16x^2 + 25y^2 - 30xy$
- C. $9x^2 + 25y^2 - 30xy$
- D. $9x^2 + 36y^2 - 30xy$

Sol: C

It's $(3x-5y)^2$

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

- A. $y + 7$
- B. $10y + 7$
- C. $10y - 7$
- D. None of these

Sol: B

17. The sum (or difference) of two like terms is a _____.

- A. unlike term
- B. like term
- C. factors
- D. None of these

Sol: B

18. State whether a given pair of terms is of like or unlike terms. $4m^2p, 4mp^2$

- A. unlike
- B. None of these
- C. like
- D. factor

Sol: C

19. What should be subtracted from $2a + 8b + 10$ to get $-3a + 7b + 16$?

- A. $6a + b - 6$
- B. $5a + b - 6$
- C. $5a + b - 7$
- D. None of these

Sol: B

20. Which of the following is a binomial?

- A. $2x + 7$
- B. $3x$
- C. $7 - 3x + 4$
- D. $4x + y + 2$

Sol: A (Binomial means two terms in expression)

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