



Ninth Grade - Number Sense - Polynomials

1) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expressions. $6x$

- Number of terms = Nil Coefficient of x = 1 Constant = 6
- Number of terms = 1 Coefficient of x = Nil Constant = 6
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- Number of terms = 1 Coefficient of x = Nil Constant = Nil

2) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expressions. $3x + 5y$

- Number of terms = 1 Coefficient of x = 3 Constant = Nil
- Number of terms = 2 Coefficient of x = Nil Constant = 3
- Number of terms = 2 Coefficient of x = 3 Constant = Nil
- Number of terms = Nil Coefficient of x = 2 Constant = Nil

3) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $4x^2 - 7x + 5$

- Number of terms = 2 Coefficient of x = 4 Constant = 2
- Number of terms = 3 Coefficient of x = Nil Constant = Nil
- Number of terms = Nil Coefficient of x = 4 Constant = Nil
- Number of terms = 3 Coefficient of x = -7 Constant = 5

4) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $16 + 5x$

- Number of terms = 1 Coefficient of x = 5 Constant = 6
- Number of terms = 2 Coefficient of x = 5 Constant = 16
- Number of terms = 3 Coefficient of x = 7 Constant = 6
- Number of terms = 4 Coefficient of x = 5 Constant = 6



5) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $4x^3 - 7x + 2x^2 - 8$

- Number of terms = 4 Coefficient of x = -7 Constant = -8
- Number of terms = 5 Coefficient of x = -4 Constant = NIL
- Number of terms = 2 Coefficient of x = -7 Constant = -7
- Number of terms = 2 Coefficient of x = -9 Constant = -4

6) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $2x - 3y + 7$

- Number of terms = 2 Coefficient of x = 3 Constant = -3
- Number of terms = 2 Coefficient of x = 3 Constant = 2
- Number of terms = 3 Coefficient of x = 2 Constant = 7
- Number of terms = Nil Coefficient of x = 4 Constant = Nil

7) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $7x^2 - 6x + 5$

- Number of terms = 2 Coefficient of x = 5 Constant = -6
- Number of terms = 3 Coefficient of x = Nil Constant = Nil
- Number of terms = 2 Coefficient of x = -6 Constant = Nil
- Number of terms = 3 Coefficient of x = -6 Constant = 5

8) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $3x - 5 + 7y$

- Number of terms = 3 Coefficient of x = Nil Constant = Nil
- Number of terms = 5 Coefficient of x = -5 Constant = -5
- Number of terms = 3 Coefficient of x = 3 Constant = -5
- Number of terms = 2 Coefficient of x = 2 Constant = 7



9) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $7x^2 - 2y^2 - 2$

- Number of terms = 3 Coefficient of x = Nil Constant = Nil
- Number of terms = 3 Coefficient of x = Nil Constant = -2
- Number of terms = 4 Coefficient of x = 7 Constant = -2
- Number of terms = 4 Coefficient of x = Nil Constant = 7

10) Write down the number of terms, coefficient of x (if any) and constant (if any) of the following expression. $9 - 2x$

- Number of terms = 9 Coefficient of x = Nil Constant = Nil
- Number of terms = 1 Coefficient of x = Nil Constant = Nil
- Number of terms = 1 Coefficient of x = -2 Constant = 9
- Number of terms = 2 Coefficient of x = -2 Constant = 9

11) Simplify the following expression : $-3p + 6p$

- $-3p$
- $3p$
- $1p$
- $6p$

12) Simplify the following expression : $b - 3 + 6 - 2b$

- $b^2 + 3$
- $b + 3$
- $-b + 3$
- $-2 + 3b$

13) Simplify the following expression : $7p - 10p$

- $-3p$



- $3p$
- $7p$
- $p^2 - 3$

14) Simplify the following expression : $-10v + 6v$

- $-4v$
- $6v$
- $4v$
- $-10v$

15) Simplify the following expression : $-9r + 10r$

- r
- $10r$
- $-1r$
- r^2

16) Simplify the following expressions: $9 + 5r - 9r$

- $-4r + 9$
- $r(4-9)$
- $4r - 9$
- $-4 + 9$

17) Simplify the following expressions: $1 - 3v + 10$

- $2v - 9$
- $2v + 10$
- $v + 10$
- $-3v + 11$



18) Simplify the following expressions: $4b + 6 - 4$

- $10b - 4$
- $b + 2$
- $4b - 2$
- $4b + 2$

19) Simplify the following expressions: $35n - 1 + 46$

- $35n - 45$
- $36n + 45$
- $35n + 45$
- $34n + 46$

20) Simplify the following expressions: $-33v - 49v$

- $-49v$
- $33v$
- $8v$
- $-82v$

21) Expand and simplify where ever necessary: $-5(-4 + 8m) - 13$

- $9 + 19m$
- $9 + 18m$
- $7 - 40m$
- $5 + 41m$

22) Expand and simplify where ever necessary: $17 - 8(-11 + 4b)$

- $85 + 11b$
- $105 - 32b$
- $10 - 11b$
- $95 + 30b$



23) Expand and simplify where ever necessary: $-9(7k - 19) + 11k$

- $7k + 18k$
- $-52k + 171$
- $51k + 170$
- $k + 11$

24) Expand and simplify where ever necessary: $4x + 12(-17x + 8)$

- $90x + 85$
- $85x + 70$
- $-200x + 96$
- $150x + 93$

25) Expand and simplify where ever necessary: $13 + 4(-3m + 14)$

- $-12m + 69$
- $-10m + 83$
- $10m + 93$
- $-20m + 70$

26) Expand and simplify where ever necessary: $-2m + 3(6m - 16)$

- $17m - 40$
- $15m + 40$
- $13m - 48$
- $16m - 48$

27) Expand and simplify where ever necessary: $6(-5h - 13) + 2$



- $30h + 73$
- $25h - 70$
- $-30h - 76$
- $32h + 76$

28) Expand and simplify where ever necessary: $-10(4n - 3) + 13$

- $-40n + 43$
- $20n + 45$
- $23n + 36$
- $35n + 40$

29) Expand and simplify where ever necessary: $18(13 - 2z) + 11z$

- $230 - 27z$
- $223 - 25z$
- $234 - 25z$
- $200 - 24z$

30) Expand and simplify where ever necessary: $16 - 4(-18 - 2p)$

- $88 + 8p$
- $82 + 7P$
- $80 + 5p$
- $83 + 3P$