EduSahara™ Assignment

Name : Polynomial Division1

Chapter : Polynomials and Factorisation

Grade : SSC Grade IX

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1. The quotient when $9w$ is divided by 3 is

   (i) $6w$ (ii) $4w$ (iii) $3w$ (iv) $2w$ (v) 0

2. The quotient when $(-2g^2)$ is divided by $(g+3)$ is

   (i) 6 (ii) $(-5g+6)$ (iii) $(-3g+6)$ (iv) $(-2g+6)$ (v) $(-g+6)$

3. The quotient when $(k+3)$ is divided by $(k-7)$ is

   (i) (-1) (ii) 1 (iii) 2 (iv) 3 (v) 0

4. The quotient when $(-3h^2-3h+5)$ is divided by $(h-5)$ is

   (i) $(-h-18)$ (ii) $(-2h-18)$ (iii) $(-5h-18)$ (iv) $(-4h-18)$ (v) $(-3h-18)$

5. The quotient when $(-5v^2+4v)$ is divided by $(v+8)$ is

   (i) $(-6v+44)$ (ii) $(-4v+44)$ (iii) $(-5v+44)$ (iv) $(-2v+44)$ (v) $(-7v+44)$

6. The quotient when $(-9q^3+5q^2+4)$ is divided by $(q+3)$ is

   (i) $(-10q^2+32q-96)$ (ii) $(-7q^2+32q-96)$ (iii) $(-9q^2+32q-96)$ (iv) $(-8q^2+32q-96)$

   (v) $(-11q^2+32q-96)$

7. The quotient when $(-n^4+8n^3+8n^2+3n+8)$ is divided by (n^2+6n+8) is

   (i) $(-3n^2+14n-68)$ (ii) $(14n-68)$ (iii) $(-n^2+14n-68)$ (iv) $(2n^2+14n-68)$ (v) $(-2n^2+14n-68)$

8. The quotient when $(-7v^5+5v^4-3v^3+7v^2-v+1)$ is divided by $(v-1)$ is

   (i) $(-7v^4-2v^3-5v^2+2v+1)$ (ii) $(-8v^4-2v^3-5v^2+2v+1)$ (iii) $(-6v^4-2v^3-5v^2+2v+1)$

   (iv) $(-5v^4-2v^3-5v^2+2v+1)$ (v) $(-9v^4-2v^3-5v^2+2v+1)$

9. The remainder when $(-2k)$ is divided by 5 is

   (i) 1 (ii) 0 (iii) (-2) (iv) 3 (v) (-1)

10. The remainder when $(-8x^3+7x^2+6x+1)$ is divided by $(x^2+2x-24)$ is

    (i) $(-234x+553)$ (ii) $(-230x+553)$ (iii) $(-233x+553)$ (iv) $(-231x+553)$ (v) $(-232x+553)$

11. $(-18x^3+27x^2-13x+2)\div(-6x^2+5x-1)=$

    (i) $(4x-2)$ (ii) $(3x+2)$ (iii) $(-3x-2)$ (iv) $(3x-2)$ (v) $(2x-2)$

12. $(6x^4+25x^3-9x^2-81x+27) \div (6x^3+7x^2-30x+9) =$

(i) $(-x+3)$ (ii) $(x+3)$ (iii) 3 (iv) $(x-3)$ (v) $(2x+3)$

13. $(54x^5-99x^4-15x^3+89x^2-43x+6)$ divided by $(-18x^3+45x^2-31x+6) =$

(i) $(-3x^2-x+1)$ (ii) $(-3x^2-2x-1)$ (iii) $(-3x^2-2x+1)$ (iv) $(-3x^2+2x+1)$ (v) $(-3x^2-3x+1)$

14. $(24x^3y^3+4x^2y^3) \div 2xy^2 =$

(i) $(12x^2y+2y^2)$ (ii) $(12x^2y+2xy^2z)$ (iii) $(12x^3y^2+2xy)$ (iv) $(12x^3y^3+2xy)$ (v) $(12x^2y+2xy)$

15. $(432x^3y^3z^2+108x^2y^3z^3+36x^2y^3z^2) \div 6xy^2z =$

(i) $(72x^2yz+18xy^2z^3+6xyz)$ (ii) $(72x^2yz+6xyz+18y^2z^2)$ (iii) $(72x^3y^3z+18xyz^2+6xyz)$

(iv) $(72x^3y^2z+18xyz^2+6xyz)$ (v) $(72x^2yz+18xyz^2+6xyz)$

16. Factorize and divide $(25x^4-641x^2+400) \div (5x^2-21x-20)$

(i) $(4x^2+21x-20)$ (ii) $(5x^2+21x-20)$ (iii) $(6x^2+21x-20)$ (iv) $(3x^2+21x-20)$ (v) $(7x^2+21x-20)$

17. Factorize and divide $(6x^4-33x^3-6x^2+123x-90) \div (-x^2+3x+10)$

(i) $(-6x^2-15x-9)$ (ii) $(-6x^2+15x-9)$ (iii) $(-6x^2-3x+9)$ (iv) $(-6x^2+3x+9)$ (v) $(-3x^2+18x-15)$

18. Which of the following are true ?

a) Division of a polynomial with another polynomial stops when the degree of the remainder equals the degree of the divisor
b) If p(x) is divided by (x - a), the remainder is p(a)
c) If p(a) = 0, then (x + a) perfectly divides p(x)
d) If the degree of p(x) is less then the degree of d(x), we should not divide p(x) with d(x)

(i) {a,d,b} (ii) {a,c,b} (iii) {c,d} (iv) {a,b} (v) {b,d}

19. $(10x^4+8x^3) \div 2x^2$

(i) $(5x^2+5x)$ (ii) $(4x^2+4x)$ (iii) $(5x^2-4x)$ (iv) $(5x^2+4x)$ (v) $(-5x^2+4x)$

20. $(16x^4+16x^3+3x^2) \div (4x^2+x)$

(i) $(-4x^2+3x)$ (ii) $(3x^2+3x)$ (iii) $(4x^2+3x)$ (iv) $(4x^2-3x)$ (v) $(4x^2+4x)$

21. $(3x^4+10x^3-27x^2-10x) \div (3x^2-5x-2)$

(i) (x^2+5x) (ii) (x^2+4x) (iii) (x^2+6x) (iv) (x^2-5x) (v) $(-x^2+5x)$

Assignment Key

1) (iii)	2) (iv)	3) (ii)	4) (v)	5) (iii)	6) (iii)
7) (iii)	8) (i)	9) (ii)	10) (v)	11) (iv)	12) (ii)
13) (iii)	14) (v)	15) (v)	16) (ii)	17) (ii)	18) (v)
19) (iv)	20) (iii)	21) (i)			

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