EduSahara™ Assignment

Name : Polynomial Division

Chapter : Factor Theorem

Grade : ICSE Grade X

1. The quotient when $3r$ is divided by 1 is

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

2. The quotient when $6c^2$ is divided by $(c-3)$ is

   (i) $(5c+18)$ (ii) $(6c+18)$ (iii) $(7c+18)$ (iv) $(9c+18)$ (v) $(3c+18)$

3. The quotient when $(7p-1)$ is divided by $(p+3)$ is

   (i) 9 (ii) 7 (iii) 5 (iv) 8 (v) 6

4. The quotient when $(-2e^2-8e-6)$ is divided by $(e-1)$ is

   (i) $(-2e-10)$ (ii) $(-3e-10)$ (iii) $(-4e-10)$ (iv) $(e-10)$ (v) $(-e-10)$

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

   (i) $(3s+19)$ (ii) 19 (iii) $(2s+19)$ (iv) $(4s+19)$ (v) $(5s+19)$

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

   (i) $(4k^2-6k+27)$ (ii) $(2k^2-6k+27)$ (iii) $(5k^2-6k+27)$ (iv) $(3k^2-6k+27)$ (v) $(6k^2-6k+27)$

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

   (i) $(4u^3+42u^2+372u+3343)$ (ii) $(3u^3+42u^2+372u+3343)$ (iii) $(6u^3+42u^2+372u+3343)$

   (iv) $(2u^3+42u^2+372u+3343)$ (v) $(5u^3+42u^2+372u+3343)$

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

   (i) $(6s^4-2s^3-2s^2+s+1)$ (ii) $(s^4-2s^3-2s^2+s+1)$ (iii) $(2s^4-2s^3-2s^2+s+1)$

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

9. $(-8x^3+14x+6)\div(4x^2+6x+2)=$

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

10. $(9x^4-61x^2+56x-12)\div(3x^3+x^2-20x+12)=$

    (i) $(3x-1)$ (ii) $(3x+1)$ (iii) $(4x-1)$ (iv) $(2x-1)$ (v) $(-3x-1)$

11. $(-12x^5+30x^4+18x^3-66x^2-6x+36)$ divided by $(-2x^3+9x^2-13x+6)=$

    (i) $(6x^2+13x+6)$ (ii) $(6x^2+12x-6)$ (iii) $(6x^2+12x+6)$ (iv) $(6x^2+11x+6)$ (v) $(6x^2-12x+6)$

12. $(324x^3y^2+36x^2y^2)\div 6xy=$

(i) $(54x^2y+6xy^2z)$ (ii) $(54x^2y+6y^2)$ (iii) $(54x^3y^2+6xy)$ (iv) $(54x^3y^3+6xy)$ (v) $(54x^2y+6xy)$

13. $(48x^4y^4z^4+336x^3y^4z^4+16x^3y^3z^3)\div 4x^2y^2z^2=$

(i) $(12x^2y^2z^2+84xy^3z^3+4xyz)$ (ii) $(12x^3y^4z^2+84xy^2z^2+4xyz)$ (iii) $(12x^3y^3z^2+84xy^2z^2+4xyz)$

(iv) $(12x^2y^2z^2+4xyz+84y^3z^2)$ (v) $(12x^2y^2z^2+84xy^2z^2+4xyz)$

14. $(10x^3+10x^2)\div 2x$

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

15. $(4x^4+18x^3+20x^2)\div(2x^2+5x)$

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

16. $(2x^4+5x^3+x^2-2x)\div(2x^2+3x-2)$

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

Assignment Key

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