EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Factorisation

Grade : CBSE Grade VIII

1. $(54x^4+99x^3+42x^2-9x-6)\div(-18x^3-15x^2+x+2)=$

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

2. $(4x^4+12x^3+8x^2)\div(4x^2+4x)$

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

3. The quotient of $(27a^3-108abc+64b^3+27c^3)\div(3a+4b+3c)$ is

   (i) $(9a^2-15ab-9ac+16b^2-12bc+9c^2)$ (ii) $(9a^2-12ab-9ac+16b^2-12bc+9c^2)$

   (iii) $(10a^2-12ab-9ac+16b^2-12bc+9c^2)$ (iv) $(8a^2-12ab-9ac+16b^2-12bc+9c^2)$

   (v) $(9a^2-9ab-9ac+16b^2-12bc+9c^2)$

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

   (i) $(11y^3-85y^2+761y-6842)$ (ii) $(9y^3-85y^2+761y-6842)$ (iii) $(6y^3-85y^2+761y-6842)$

   (iv) $(10y^3-85y^2+761y-6842)$ (v) $(8y^3-85y^2+761y-6842)$

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

   (i) $(-3k)$ (ii) $(-2k)$ (iii) $(-k)$ (iv) 0 (v) k

6. The quotient of $(4a^2+8ab+4b^2)\div(-2a-2b)$ is

   (i) $(-2a-4b)$ (ii) $(-a-2b)$ (iii) $(-2a-2b)$ (iv) $(-2a)$ (v) $(-3a-2b)$

7. Factorize $(48x^2-26xy-35y^2)$

   (i) $(8x-5y)(6x+7y)$ (ii) $(8x+5y)(8x-5y)$ (iii) $(8x+5y)(6x+7y)$ (iv) $(8x+5y)(6x-7y)$

   (v) $(8x-5y)(6x-7y)$

8. $9\times a\times a\times a\times b\times b\times c\times c=$

   (i) $6a^4b^2c^2$ (ii) $9a^4b^2c^2$ (iii) $9a^5b^2c^2$ (iv) $9a^3b^2c^2$ (v) $11a^4b^2c^2$

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

   (i) $(-4d+21)$ (ii) 21 (iii) $(-2d+21)$ (iv) $(-5d+21)$ (v) $(-3d+21)$

10. Factorize (j^4-256)

(i) $(j+4)(j-4)(j^2-8)$ (ii) $(j+4)(j+4)(j-4)$ (iii) $(j+4)(j-4)(j-4)$ (iv) $(j+4)(j-4)(j^2+16)$

(v) $(j^2+16)(j^2-8)$

11. Which of the following is a factor of $(3x^5+yz^2)$?

(i) no factors (ii) $3x^5z$ (iii) $3y$ (iv) $3x^5$ (v) yz^2

12. $11b^3c^2d^3=$

(i) $8\times b\times b\times b\times c\times c\times d\times d\times d$ (ii) $14\times b\times b\times b\times c\times c\times d\times d\times d$ (iii) $11\times b\times b\times b\times c\times c\times d\times d\times d$

(iv) $11\times b\times b\times c\times c\times d\times d\times d$ (v) $11\times b\times b\times b\times b\times c\times c\times d\times d\times d$

13. Which of the following is an irreducible factor of $35x^4y^5z^5$?

(i) x (ii) x^2y (iii) y^4z (iv) $x^2y^4z^5$ (v) xz^5

14. The quotient of $(16a^2-8ab+16ac+b^2-4bc+4c^2)\div(4a-b+2c)$ is

(i) $(5a-b+2c)$ (ii) $(3a-b+2c)$ (iii) $(4a+2b+2c)$ (iv) $(4a-b+2c)$ (v) $(4a-3b+2c)$

15. The quotient when $(-8g^2-5g+6)$ is divided by $(g-2)$ is

(i) $(-8g-21)$ (ii) $(-7g-21)$ (iii) $(-9g-21)$ (iv) $(-11g-21)$ (v) $(-6g-21)$

16. The remainder when $(2f^2+3f)$ is divided by $(f+4)$ is

(i) 20 (ii) 22 (iii) 19 (iv) 21 (v) 17

17. Factorize $a^2c^2 - b^2c^2 - a^2d^2 + b^2d^2$

(i) $(a + b)(a - b)(c + d)(b - d)$ (ii) $(a + b)(a - b)(c + d)(c - d)$ (iii) $(a + b)(a - b)(b + d)(c - d)$

(iv) $(a + c)(a - c)(b + d)(b - d)$ (v) $(a + b)(a - c)(c + d)(c - d)$

18. $(-36x^5-72x^4+139x^3+89x^2-15x-9)$ divided by $(-6x^3-19x^2-2x+3)=$

(i) $(6x^2-7x+3)$ (ii) $(6x^2-6x-3)$ (iii) $(6x^2+7x-3)$ (iv) $(6x^2-7x-3)$ (v) $(6x^2-8x-3)$

19. The quotient of $(9a^2+12ab+4b^2)\div(-3a-2b)$ is

(i) $(-2a-2b)$ (ii) $(-3a-5b)$ (iii) $(-3a)$ (iv) $(-4a-2b)$ (v) $(-3a-2b)$

20. Factorize $(144x^2-36)$

(i) $(12x+18)(12x-2)$ (ii) $(12x-6)(12x-6)$ (iii) $(12x-18)(12x+2)$ (iv) $(12x+6)(12x+6)$

(v) $(12x+6)(12x-6)$

21. Which of the following are not polynomials?

a) $(9x+11y)$

b) $4x^2$

c) $\frac{(9x+11y)}{(7x-2y)}$

d) $x+\frac{1}{x}$

e) $(63x^2+59xy-22y^2)$

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

22. Factorize $(4x^3-26x^2+16x+96)$

(i) $(2x+3)(2x-4)(3x-8)$ (ii) $(2x+3)(3x-4)(5x-8)$ (iii) $(2x+3)(-x-4)(-8)$

(iv) $(2x+3)(x-4)(2x-8)$ (v) $(2x+3)(-4)(x-8)$

23. The quotient when $4r^2$ is divided by $(r+2)$ is

(i) $(7r-8)$ (ii) $(5r-8)$ (iii) $(2r-8)$ (iv) $(4r-8)$ (v) $(3r-8)$

24. Factorize $(x^2+9x+20)$

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

25. $12\times k\times k\times k=$

(i) $10k^3$ (ii) $12k^3$ (iii) $12k^4$ (iv) $12k^2$ (v) $15k^3$

Assignment Key

1) (ii)	2) (ii)	3) (ii)	4) (ii)	5) (iii)	6) (iii)
7) (iv)	8) (ii)	9) (v)	10) (iv)	11) (i)	12) (iii)
13) (i)	14) (iv)	15) (i)	16) (i)	17) (ii)	18) (iv)
19) (v)	20) (v)	21) (ii)	22) (iv)	23) (iv)	24) (ii)
25) (ii)					