



1. The remainder when $(8z^2 - 3z - 3)$ is divided by $(z-4)$ is

- (i) 116 (ii) 114 (iii) 112 (iv) 110 (v) 113

2. $k^3 l^2 =$

- (i) $-2 \times k \times k \times k \times / \times /$ (ii) $k \times k \times k \times k \times / \times /$ (iii) $k \times k \times / \times /$ (iv) $3 \times k \times k \times k \times / \times /$ (v) $k \times k \times k \times / \times /$

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

- (i) $(-9t+32)$ (ii) $(-10t+32)$ (iii) $(-12t+32)$ (iv) $(-8t+32)$ (v) $(-6t+32)$

4. Factorize $(x^4 - 15x^3 + 39x^2 + 235x - 900)$

- (i) $(x+4)(3x-5)(4x-9)(4x-5)$ (ii) $(x+4)(-x-5)(-2x-9)(-x-5)$ (iii) $(x+4)(-5)(-9)(-5)$
(iv) $(x+4)(2x-5)(2x-9)(2x-5)$ (v) $(x+4)(x-5)(x-9)(x-5)$

5. The quotient when $(-8m^4 + 4m^3 - 9m^2 - 2m + 3)$ is divided by $(m+9)$ is

- (i) $(-7m^3 + 76m^2 - 693m + 6235)$ (ii) $(-9m^3 + 76m^2 - 693m + 6235)$ (iii) $(-10m^3 + 76m^2 - 693m + 6235)$
(iv) $(-8m^3 + 76m^2 - 693m + 6235)$ (v) $(-5m^3 + 76m^2 - 693m + 6235)$

6. The quotient of $(27a^3 - 144abc - 64b^3 - 64c^3) \div (3a - 4b - 4c)$ is

- (i) $(9a^2 + 12ab + 12ac + 16b^2 - 16bc + 16c^2)$ (ii) $(9a^2 + 15ab + 12ac + 16b^2 - 16bc + 16c^2)$
(iii) $(8a^2 + 12ab + 12ac + 16b^2 - 16bc + 16c^2)$ (iv) $(10a^2 + 12ab + 12ac + 16b^2 - 16bc + 16c^2)$
(v) $(9a^2 + 10ab + 12ac + 16b^2 - 16bc + 16c^2)$

7. Factorize $(16a^2 - 8ab + 8ac + b^2 - 2bc + c^2)$

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

8. Which of the following are not polynomials?

- a) $\frac{(8x+4y)}{(2x-11y)}$
b) \sqrt{x}
c) $121x^2$
d) $(16x^2 - 80xy - 44y^2)$
e) $(2x-11y)$
(i) {d,b} (ii) {d,b,a} (iii) {c,a} (iv) {e,c,a} (v) {a,b}

9. Factorize $(x^3 + 5x^2 - 16x - 80)$

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

10. Which of the following are true?

- a) πr^2 is a monomial
b) Degree of zero polynomial is zero
c) Every polynomial is a binomial
d) A binomial has two and only two terms
e) A binomial may have degree 3
- (i) {b,a,d} (ii) {c,d} (iii) {a,d,e} (iv) {b,a} (v) {b,c,e}

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

- (i) $(-5d+25)$ (ii) $(-6d+25)$ (iii) $(-4d+25)$ (iv) $(-7d+25)$ (v) $(-2d+25)$

12. The quotient of $(-64a^3 - 64b^3) \div (-4a - 4b)$ is

- (i) $(16a^2 - 19ab + 16b^2)$ (ii) $(17a^2 - 16ab + 16b^2)$ (iii) $(15a^2 - 16ab + 16b^2)$ (iv) $(16a^2 - 13ab + 16b^2)$
(v) $(16a^2 - 16ab + 16b^2)$

13. $m \times m \times m \times n \times n \times n \times o \times o \times o =$

- (i) $-m^3 n^3 o^3$ (ii) $m^4 n^3 o^3$ (iii) $m^2 n^3 o^3$ (iv) $3m^3 n^3 o^3$ (v) $m^3 n^3 o^3$

14. $(20x^3y^4 + 4x^2y^4) \div 2xy^2 =$

- (i) $(10x^3y^3 + 2xy^2)$ (ii) $(10x^2y^2 + 2xy^2)$ (iii) $(10x^2y^2 + 2xy^3z)$ (iv) $(10x^2y^2 + 2y^3)$
(v) $(10x^3y^4 + 2xy^2)$

15. Factorize $(x^2 + 7x + 10)$

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

16. Factorize $(4x^2 + 4x - 35)$

- (i) $(2x+7)(5x-5)$ (ii) $(2x+7)(3x-5)$ (iii) $(2x+7)(x-5)$ (iv) $(2x+7)(-x-5)$ (v) $(2x+7)(2x-5)$

17. $11 \times e \times e \times e \times f \times f \times f =$

- (i) $14e^3f^3$ (ii) $8e^3f^3$ (iii) $11e^4f^3$ (iv) $11e^3f^3$ (v) $11e^2f^3$

18. Factorize $(25x^2 + 5xy - 2y^2)$

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

19. $(144x^3y^4z^3 + 36x^3y^3z^3 + 720x^2y^3z^3) \div 6xy^2z =$

- (i) $(24x^3y^4z^2 + 6x^2yz^2 + 120xyz^2)$
- (ii) $(24x^3y^3z^2 + 6x^2yz^2 + 120xyz^2)$
- (iii) $(24x^2y^2z^2 + 6x^2yz^2 + 120xyz^2)$
- (iv) $(6x^2y^2z^3 + 24x^2y^2z^2 + 120xyz^2)$
- (v) $(24x^2y^2z^2 + 6xy^2z^2 + 120xyz^2)$

20. Factorize $(100x^2 - 100)$

- (i) $(10x+25)(10x-4)$
- (ii) $(10x+10)(10x+10)$
- (iii) $(10x-25)(10x+4)$
- (iv) $(10x+10)(10x-10)$
- (v) $(10x-10)(10x-10)$

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

- (i) $(8u+62)$
- (ii) $(11u+62)$
- (iii) $(9u+62)$
- (iv) $(7u+62)$
- (v) $(6u+62)$

22. $(-24x^5 + 32x^4 + 34x^3 - 38x^2 - 10x + 6)$ divided by $(12x^3 - 10x^2 - 16x + 6) =$

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

23. The remainder when $(-6d^3 - d^2 - 1)$ is divided by $(d+6)$ is

- (i) 1257
- (ii) 1260
- (iii) 1261
- (iv) 1258
- (v) 1259

24. $7 \times h \times h \times h =$

- (i) $5h^3$
- (ii) $9h^3$
- (iii) $7h^3$
- (iv) $7h^2$
- (v) $7h^4$

25. The remainder when $(-8s^2 - 4s)$ is divided by $(s-7)$ is

- (i) (-419)
- (ii) (-418)
- (iii) (-420)
- (iv) (-421)
- (v) (-422)

Assignment Key

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

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