



1. Factorize  $(6x^2 + 19x + 10)$

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

2. Factorize  $(x^3 - 3x^2 - 33x + 35)$

- (i)  $(x-1)(x-7)(x+5)$  (ii)  $(x-1)(-2x-7)(-x+5)$  (iii)  $(x-1)(2x-7)(2x+5)$  (iv)  $(x-1)(-7)5$   
(v)  $(x-1)(3x-7)(4x+5)$

3. Factorize  $(x^2 + 2xa - 3x + a^2 - 3a - 10)$

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

4. Factorize  $(2x^2 - 3xy - 20y^2)$

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

5. Factorize  $9a^3 - 49a$

- (i)  $(3a+7)(3a^2+7)a$  (ii)  $(3a+7)(3a-7)a$  (iii)  $(3a-7)(3a^2+7)a$  (iv)  $(3a+7)(7a-3)a$   
(v)  $(3a^2+7)(7a-3)a$

6. Factorize  $(x^2 + 5x + 4)$

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

7. Factorize  $a^2 - b^2 - c^2 - 2bc$

- (i)  $(a+b+c)(a+b-c)$  (ii)  $(a-b-c)(a+b+c)$  (iii)  $(a-b-c)(a-b+c)$  (iv)  $(a+b+c)(a-b+c)$   
(v)  $(a-b-c)(a+b-c)$

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

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

9. Factorize  $(12x^2 + 8xy - 20y^2)$

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

10. Factorize  $(24xy+30y^2)$

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

11. Factorize  $(21a^2b+6ab^2)$

- (i)  $3ab(7a-2b)$  (ii)  $3ab(-7a-2b)$  (iii)  $3b(7a-2b)$  (iv)  $3a(7a+2b)$  (v)  $3ab(7a+2b)$

## Assignment Key

1) (iv)

2) (i)

3) (iv)

4) (ii)

5) (ii)

6) (iv)

7) (ii)

8) (iii)

9) (v)

10) (ii)

11) (v)