

EduSahara™ Learning Center Assignment**Grade : Class VIII, ICSE****Chapter : Factorization****Name : Factorisation by Grouping****Licensed To : Teachers and Students for non-commercial use**

1. Factorize ($2x^2 - 10x + 8$)

(i) ($2x - 8$) ($2x - 1$)

(ii) ($2x - 8$) ($x - 1$)

(iii) ($2x - 8$) (-1)

(iv) ($2x - 8$) ($-2x - 1$)

(v) ($2x - 8$) ($3x - 1$)

2. Factorize ($x^2 + 2xa + a^2 - 81$)

(i) ($x - a - 9$) ($x + a - 9$)

(ii) ($x + a + 9$) ($x + a - 9$)

(iii) ($x + a + 9$) ($x - a - 9$)

(iv) ($x + a - 9$) ($x - a + 9$)

(v) ($x - a + 9$) ($x + a + 9$)

3. Factorize ($12x^2 + 54xy + 24y^2$)

(i) ($2x - 8y$) ($6x + 3y$)

(ii) ($2x + 8y$) ($6x + 3y$)

(iii) ($2x + 8y$) ($6x - 3y$)

(iv) ($2x + 8y$) ($2x - 8y$)

(v) ($2x - 8y$) ($6x - 3y$)

4. Factorize $(x^2 + 10x + 16)$

(i) $(x - 8)(x - 2)$

(ii) $(x + 8)(x + 2)$

(iii) $(x - 8)(x + 2)$

(iv) $(x + 8)(x - 2)$

5. 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) $(a - b - c)(a + b - c)$

6. Factorize $(6x^2 - 16xy - 6y^2)$

(i) $(6x + 2y)(x + 3y)$

(ii) $(6x + 2y)(6x + 2y)$

(iii) $(6x - 2y)(x - 3y)$

(iv) $(6x - 2y)(x + 3y)$

(v) $(6x + 2y)(x - 3y)$

7. Factorize $(32xy + 48y^2)$

(i) $8y(4x + 6y)$

$$(ii) \quad 8x (4x + 6y)$$

$$(iii) \quad 8y (4x - 6y)$$

$$(iv) \quad 8y (-4x - 6y)$$

$$(v) \quad 8x (4x - 6y)$$

$$8. \text{ Factorize } (32a^2b + 72ab^2)$$

$$(i) \quad 8ab (-4a - 9b)$$

$$(ii) \quad 8ab (4a - 9b)$$

$$(iii) \quad 8b (4a - 9b)$$

$$(iv) \quad 8a (4a + 9b)$$

$$(v) \quad 8ab (4a + 9b)$$

$$9. \text{ Factorize } (x^4 + 4x^2 + 3)$$

$$(i) \quad (x^2 + 3)(x^2 + 1)$$

$$(ii) \quad (x^2 + 1)(x^2 - 1)$$

$$(iii) \quad (x^2 + 3)(x^2 - 1)$$

$$(iv) \quad (x^2 - 3)(x^2 + 1)$$

$$(v) \quad (x^2 - 3)(x^2 - 1)$$

Assignment Key

- 1) (ii)
- 2) (ii)
- 3) (ii)
- 4) (ii)
- 5) (ii)
- 6) (v)
- 7) (i)
- 8) (v)
- 9) (i)