

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

1. Factorize ($6x^2 - 31x + 18$)

(i) ($2x - 9$) ($5x - 2$)

(ii) ($2x - 9$) ($4x - 2$)

(iii) ($2x - 9$) ($3x - 2$)

(iv) ($2x - 9$) ($2x - 2$)

(v) ($2x - 9$) ($x - 2$)

2. Factorize ($4x^3 - 28x^2 - 104x + 288$)

(i) ($2x - 4$) ($3x + 8$) ($2x - 9$)

(ii) ($2x - 4$) ($x + 8$) (-9)

(iii) ($2x - 4$) ($2x + 8$) ($x - 9$)

(iv) ($2x - 4$) ($5x + 8$) ($3x - 9$)

(v) ($2x - 4$) 8 ($-x - 9$)

3. Factorize ($x^4 - 18x^3 + 101x^2 - 192x + 108$)

(i) ($x - 2$) ($-x - 1$) ($-x - 6$) ($-2x - 9$)

(ii) ($x - 2$) (-1) (-6) (-9)

(iii) ($x - 2$) ($4x - 1$) ($3x - 6$) ($3x - 9$)

(iv) ($x - 2$) ($x - 1$) ($x - 6$) ($x - 9$)

(v) ($x - 2$) ($2x - 1$) ($2x - 6$) ($2x - 9$)

4. Factorize ($6x^2 + 9x - 81$)

(i) ($3x - 9$) ($5x + 9$)

(ii) ($3x - 9$) ($2x + 9$)

(iii) ($3x - 9$) ($3x + 9$)

(iv) ($3x - 9$) ($x + 9$)

(v) ($3x - 9$) ($-x + 9$)

5. Factorize ($2x^3 - 34x^2 + 158x - 126$)

(i) ($x - 9$) ($3x - 7$) ($4x - 2$)

(ii) ($x - 9$) ($x - 7$) ($2x - 2$)

(iii) ($x - 9$) ($2x - 7$) ($3x - 2$)

(iv) ($x - 9$) ($-x - 7$) ($-x - 2$)

(v) ($x - 9$) (-7) ($x - 2$)

6. Factorize ($x^4 - 3x^3 - 90x^2 + 108x + 1944$)

(i) ($x + 6$) (-9) (-6) 6

(ii) ($x + 6$) ($x - 9$) ($x - 6$) ($x + 6$)

(iii) ($x + 6$) ($2x - 9$) ($2x - 6$) ($2x + 6$)

(iv) ($x + 6$) ($3x - 9$) ($3x - 6$) ($4x + 6$)

(v) ($x + 6$) ($-x - 9$) ($-x - 6$) ($-x + 6$)

7. Factorize ($9x^2 - 18x + 5$)

(i) ($3x - 1$) ($4x - 5$)

(ii) ($3x - 1$) ($3x - 5$)

$$(iii) (3x - 1)(6x - 5)$$

$$(iv) (3x - 1)(2x - 5)$$

$$(v) (3x - 1)(-5)$$

8. Factorize $(2x^3 - 26x^2 + 8x + 576)$

$$(i) (x - 8)(-9)(x + 8)$$

$$(ii) (x - 8)(4x - 9)(5x + 8)$$

$$(iii) (x - 8)(x - 9)(2x + 8)$$

$$(iv) (x - 8)(-2x - 9)8$$

$$(v) (x - 8)(2x - 9)(3x + 8)$$

9. Factorize $(x^4 - 10x^3 + 7x^2 + 162x - 360)$

$$(i) (x - 3)(4x - 5)(3x - 6)(3x + 4)$$

$$(ii) (x - 3)(x - 5)(x - 6)(x + 4)$$

$$(iii) (x - 3)(-5)(-6)4$$

$$(iv) (x - 3)(2x - 5)(2x - 6)(2x + 4)$$

$$(v) (x - 3)(-x - 5)(-2x - 6)(-x + 4)$$

10. Factorize $(4x^2 + 14x + 12)$

$$(i) (2x + 3)(5x + 4)$$

$$(ii) (2x + 3)(2x + 4)$$

$$(iii) (2x + 3)(3x + 4)$$

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

$$(v) (2x + 3)(x + 4)$$

11. Factorize $(8x^3 - 16x^2 - 154x + 360)$

(i) $(2x - 8)(2x + 9)(2x - 5)$

(ii) $(2x - 8)(-x + 9)(-5)$

(iii) $(2x - 8)(3x + 9)(3x - 5)$

(iv) $(2x - 8)(5x + 9)(5x - 5)$

(v) $(2x - 8)(x + 9)(x - 5)$

12. Factorize $(x^4 - 14x^3 - 19x^2 + 896x - 2880)$

(i) $(x - 8)(2x - 9)(2x + 8)(2x - 5)$

(ii) $(x - 8)(3x - 9)(4x + 8)(3x - 5)$

(iii) $(x - 8)(x - 9)(x + 8)(x - 5)$

(iv) $(x - 8)(-x - 9)(-x + 8)(-x - 5)$

(v) $(x - 8)(-9)8(-5)$

Assignment Key

- 1) (iii)
- 2) (iii)
- 3) (iv)
- 4) (ii)
- 5) (ii)
- 6) (ii)
- 7) (ii)
- 8) (iii)
- 9) (ii)
- 10) (ii)
- 11) (i)
- 12) (iii)