

EduSahara™ Learning Center Assignment**Grade : Class X, CBSE****Chapter : Quadratic Equations****Name : Solving Quadratic Equations By Factorization**

1. Factorize ($x^2 + 2xa - x + a^2 - a - 42$)

(i) ($x + a + 6$) ($x - a - 7$)

(ii) ($x - a - 7$) ($x + a - 6$)

(iii) ($x + a - 7$) ($x - a + 6$)

(iv) ($x + a + 6$) ($x + a - 7$)

(v) ($x - a + 6$) ($x + a + 7$)

2. Factorize ($x^2 - 81$)

(i) ($x - 3$) ($x + 27$)

(ii) ($x + 9$) ($x + 9$)

(iii) ($x + 3$) ($x - 27$)

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

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

3. Factorize ($100x^2 - 64$)

(i) ($10x + 8$) ($10x - 8$)

(ii) ($10x - 4$) ($10x + 16$)

(iii) ($10x - 8$) ($10x - 8$)

(iv) ($10x + 4$) ($10x - 16$)

(v) ($10x + 8$) ($10x + 8$)

4. Factorize ($x^2 + 11x + 18$)

(i)

$$(x + 9)(x + 2)$$

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

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

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

5. Factorize $(x^2 + 2xa + x + a^2 + a - 56)$

(i) $(x + a + 8)(x - a - 7)$

(ii) $(x + a - 7)(x - a + 8)$

(iii) $(x - a - 7)(x + a - 8)$

(iv) $(x + a + 8)(x + a - 7)$

(v) $(x - a + 8)(x + a + 7)$

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

(i) $(x - 25)(x + 4)$

(ii) $(x - 10)(x - 10)$

(iii) $(x + 10)(x - 10)$

(iv) $(x + 25)(x - 4)$

(v) $(x + 10)(x + 10)$

7. Factorize $(64x^2 - 36)$

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

(ii) $(8x + 6)(8x - 6)$

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

(iv) $(8x - 4)(8x + 9)$

(v) $(8x - 6)(8x - 6)$

8. Factorize $(x^2 + 16x + 63)$

(i) $(x + 7)(x - 9)$

(ii) $(x + 7)(x + 9)$

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

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

9. Factorize $(x^2 + 2xa + a^2 - 16)$

(i) $(x - a - 4)(x + a - 4)$

(ii) $(x + a - 4)(x - a + 4)$

(iii) $(x - a + 4)(x + a + 4)$

(iv) $(x + a + 4)(x + a - 4)$

(v) $(x + a + 4)(x - a - 4)$

10. Factorize $(x^2 - 64)$

(i) $(x + 8)(x + 8)$

(ii) $(x + 4)(x - 16)$

(iii) $(x - 4)(x + 16)$

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

(v) $(x - 8)(x - 8)$

11. Factorize $(49x^2 - 36)$

(i) $(7x - 6)(7x - 6)$

(ii) $(7x - 2)(7x + 18)$

(iii) $(7x + 6)(7x + 6)$

(iv) $(7x + 2)(7x - 18)$

(v) $(7x + 6)(7x - 6)$

12. Factorize ($x^2 + 11x + 24$)

(i) ($x - 3$) ($x + 8$)

(ii) ($x + 3$) ($x - 8$)

(iii) ($x - 3$) ($x - 8$)

(iv) ($x + 3$) ($x + 8$)

Assignment Key

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