

Complete each of the following problems by factoring and solving for the unknown.

GCF (Greatest Common Factor)

1. $15m^2 - 9 = 0$

2. $5x^2 + 7x = 0$

3. $5x^2 + 10x = 0$

Difference of Two Squares

4. $9a^2 - 100 = 0$

5. $16x^2 - 1 = 0$

6. $64u^2 - 25v^2 = 0$

Perfect Square Trinomial:

7. $x^2 - 4x + 4 = 0$

8. $a^2 + 16a + 64 = 0$

9. $y^2 + 12y + 144 = 0$

Factoring Trinomials of the Form $x^2 + bx + c = 0$

10. $x^2 + 8x + 7 = 0$

11. $z^2 - 6z + 5 = 0$

12. $p^2 - 5p + 6 = 0$

Factoring Trinomials of the Form $x^2 + bx - c$:

13. $z^2 + 3z - 4 = 0$

14. $z^2 - 3z - 4 = 0$

15. $x^2 - x - 20 = 0$

Factoring Trinomials of the Form $ax^2 + bx + c = 0$

16. $7x + 2x^2 - 9 = 0$

17. $3x^2 + 7x + 2 = 0$

18. $14x^2 - 17x + 5 = 0$

Completing the Square

10. $x^2 + 8x + 7 = 0$

11. $z^2 - 6z + 5 = 0$

12. $p^2 - 5p + 6 = 0$

Quadratic Formula

16. $7x + 2x^2 - 9 = 0$

17. $3x^2 + 7x + 2 = 0$

18. $14x^2 - 17x + 5 = 0$