

Steps to Complete the Square:

1. Add or subtract the constant from both sides
2. If the leading coefficient is LARGER than 1, divide it into each numerical term
3. Find $(\frac{b}{2})^2$ and add it to both sides
4. Factor the left side, and write it as a binomial squared
5. Take the square root of both sides → be sure to account for the + AND – result
6. Solve for x → make sure everything is simplified

Completing the Square Day 2 Notes

Examples: Solve each by completing the square

a) $x^2 - 10x - 7 = 0$

b) $x^2 + 14x - 1 = 0$

c) $x^2 - 7x + 5 = 0$

d) $2x^2 + 7x - 9 = 0$

e) $4x^2 + 20x + 13 = 0$

f) $2x^2 + 4x - 7 = 0$