

Finding Roots of Quadratic Functions by Completing the Square C

Name: _____

Period: _____

Directions: Find the roots of each quadratic function by completing the square. **Show all work.**

1. $f(x) = x^2 + 6x + 14$

2. $f(x) = x^2 - 10x + 34$

3. $f(x) = x^2 - 8x - 11$

4. $f(x) = x^2 + 13x + 50$

5. $f(x) = 2x^2 + 12x + 86$

6. $f(x) = 3x^2 + 21x + 45$

7. $f(x) = x^2 - 20x + 120$

8. $f(x) = x^2 + 4x - 117$