Mixed Quadratic Equations Solving

Solve each equation using any method (square root, factoring, zero product property, complete the square, quadratic formula). Leave your answer in radical form. No decimals.

1. $(x - 4)^2 + 2 = 7$

2. $2x^2 + 6x - 5 = 0$

3. $x^2 + 6x - 7 = 0$

4. $x^2 + 10x + 2 = 5$

5. $5x^2 + 3x + 9 = 1$

6. $3(x + 8)^2 + 17 = 2$