

Solving by Completing the Square

Solve each equation by first completing the square and then using the equal squares method. Show your work. *One problem is impossible.* (The solutions are not necessarily integers.)

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

2. $x^2 + 6x = 16$

3. $x^2 + 10x = -24$

4. $x^2 + 8x + 20 = 8$

5. $x^2 + 4x + 9 = 2$

6. $4x^2 + 8x - 5 = 0$

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

8. $x^2 + 12x + 26 = -3$