

Name: _____ Date: _____

Completing the Square**Solve by Completing the Square. NO CALCULATOR for #1-4**

1. $x^2 + 6x + 4 = 0$

2. $x^2 + 8 = 6x$

3. $2x^2 - 20x = 8$

4. $x^2 = 24 - 4x$

You may use a calculator for #5 – 16

5. $x^2 + 10x = 42$

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

7. $6x^2 + 4x - 55 = 5x^2$

8. $x^2 + 15x + 2 = 5x - 7$

Error Analysis: Circle the error. Then, describe and correct the error in solving by completing the square.

Problem	Description of Error	Rework
9. $x^2 + 8x = 10$ $x^2 + 8x + 16 = 10$ $(x + 4)^2 = 10$ $x + 4 = \pm\sqrt{10}$ $x = -4 \pm \sqrt{10}$		
10. $x^2 + 4x = 12$ $x^2 + 4x + 4 = 16$ $(x + 2)^2 = 16$ $x + 2 = \pm 4$ $x = \pm 2$		

Solve by using the Quadratic Formula:

11. $x^2 - 1 = 10x$ **This one is Non-Calc**

12. $2x^2 - 3x - 9 = 0$

13. $x^2 + 11x - 10 = 7$

14. $3x^2 - 6 = 0$

Solve by Factoring:

15. $2x^2 - 18x + 34 = 6$

16. $7x^2 - 10x + 6 = 7x$