

Homework 5

Playing with x^2

due Monday October 27th
at the beginning of class

Please write your number (not name).

Explain and justify your thought process.

1. Expand $(x + 1)^2$
2. Expand $(x + 6)^2$
3. Expand $(x - 2)^2$

4. Graph $x^2 + 12x + 36$
5. Graph $x^2 - 4x + 4$

6. Graph $x^2 + 12x + 55$
7. Graph $x^2 - 4x - 100$

8. Find the minimum value of $x^2 + 2x + 5$.
9. Find all solutions to $0 = x^2 + 12x + 55$
10. Find all solutions to $-96 = x^2 - 4x - 100$

11. Solve $0 = x^2 - 2x + 5$

12. Solve $0 = x^2 + 12x + 33$

13. Solve $(x - 1)(x + 2) = 0$

14. Solve $(2x - 100)(x + 12) = 0$