

Quadratics Review (#40)

Multiply. Your answers should all be quadratic trinomials.

1. $(x - 2)^2 =$

2. $(x + 5)^2 =$

3. $(x + 3)^2 =$

4. $(x - 1.5)^2 =$

5. $(x - 4)^2 =$

6. $(x + 0.6)^2 =$

7. Looking at your answers to questions 1-6, what pattern do you notice between the linear coefficient and the constant?

Fill in the blank so that the trinomial factors into a perfect square, then factor.

8. $x^2 + 12x + \underline{\quad} =$

9. $x^2 - 6x + \underline{\quad} =$

10. $x^2 + x + \underline{\quad} =$

11. $x^2 - 5x + \underline{\quad} =$

Solve by completing the square.

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

13. $x^2 - x = 6$

14. $x^2 - 2x = 2$

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

Parabolas Review.

Make a rough sketch of each parabola, and label them. Use x-intercepts to plot f , g , and h . Use vertical and horizontal shifts to plot i , j , and k .

$$f(x) = (x + 8)(x + 6)$$

$$g(x) = -2(x - 7)^2$$

$$h(x) = -x(x - 2)$$

$$i(x) = (x + 1)^2 + 5$$

$$j(x) = -(x - 6)^2 + 1$$

$$k(x) = (x + 5)^2 - 4$$

