

Name: _____

Date: _____

Reverse the box: put x^2 and the constant in, split the middle term across the other two cells, read the sides. Last two are challenge problems.

1. Cells x^2 and 12 are set; middle is $7x$. How do you split $7x$?

show your work

2. Finish: sides of the box for $x^2 + 7x + 12$?

show your work

3. Box-factor $x^2 + 9x + 20$.

show your work

4. Box-factor $x^2 - 2x - 15$.

show your work

5. Box-factor $x^2 - 10x + 21$.

show your work

6. Box-factor $2x^2 + 11x + 5$.

show your work

7. Box-factor $3x^2 + 8x + 4$.

show your work

8. A box has cells x^2 , $-6x$, $6x$, -36 .
What is factored, and what is special?

show your work

9. Box-factor $4x^2 + 8x + 3$. ★ CHALLENGE

show your work

10. The box for a mystery trinomial has sides $(x + a)(x + b)$ with cell sum $x^2 + 12x + 32$. Find a and b , then state the zeros of the trinomial. ★ CHALLENGE

show your work