

Factoring Trinomials when A = 1

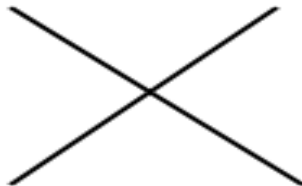
Steps

1. ALWAYS Check for a GCF!!!
2. Make sure trinomial is in standard form.

Standard Form → _____ x^2 + _____ x + _____

3. Set up/Do the 'X-Method' / Puzzle

*Figure out the side numbers first, then adjust the signs!



"You must find two integers that MULTIPLY to the TOP and ADD to the BOTTOM."

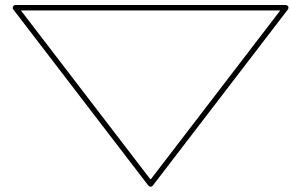
4. If A = 1, then put side numbers into binomials.

$$(x + \quad)(x + \quad)$$

MATCH variable and careful with signs!

5. Check your work by multiplying the factors.

Reminders



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Examples

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



2. $b^2 - 2b - 63$



3. $x^2 - 16x + 64$



4. $k^2 - 12k - 64$



5. $3x^2 - 6x - 45$ (Hint: Is there a GCF?)



6. $-2n^2 - 6n + 36$



Practice

Directions: Factor each trinomial. Box or circle answer. Look for a GCF first!

1) $p^2 + 14p + 48$

2) $n^2 + 10n + 16$

3) $p^2 + 14p + 40$

4) $r^2 + 9r + 18$

5) $p^2 - 8p + 7$

6) $b^2 - 9b + 14$

7) $b^2 - 8b + 15$

8) $m^2 - 16m + 63$

9) $k^2 - 4k - 60$

10) $m^2 + m - 6$

11) $p^2 - 2p - 15$

12) $r^2 + r - 20$

13) $3r^2 + 21r + 30$

14) $2p^2 + 14p + 24$

15) $2r^2 - 16r + 30$

16) $3n^2 - 9n + 6$

17) $3b^2 - 3b - 36$

18) $2n^2 + 2n - 12$