Factoring Trinomials with a Leading Coefficient of One

Name: _____

1. $x^2 + 6x + 8$ $(x+4)(x+2) = (x+2)(x+4)$

2. $x^2 + 11x + 24$ $(x+8)(x+3)$

3. $x^2 + 8x + 15$ $(x+5)(x+3)$

4. $x^2 - x - 6$ $(x-3)(x+2) = (x+2)(x-3)$

5. $x^2 + 3x - 40$ $(x+8)(x-5)$

6. $x^2 - 5x - 24$ $(x-8)(x+3)$

7. $x^2 - 7x + 12$ $(x-3)(x-4)$

8. $x^2 - 11x + 10$ $(x-10)(x-1)$

9. $x^2 - 7x + 10$ $(x-5)(x-2)$

10. $x^2 + 3x - 28$ $(x+7)(x-4)$

11. $x^2 + 5x + 6$ $(x+3)(x+2)$

12. $x^2 + 6x + 9$ $(x+3)(x+3)$ or $(x+3)^2$

13. $x^2 - 10x + 25$ $(x-5)(x-5)$ or $(x-5)^2$

14. $x^2 + 2x + 1$ $(x+1)(x+1)$ or $(x+1)^2$

15. $x^2 - 2x - 3$ $(x-3)(x+2)$

16. $x^2 - 9x - 36$ $(x-12)(x+3)$

17. $x^2 - 7xy - 8y^2$ $(x-8y)(x+y)$

18. $x^2 - 7xy - 60y^2$ $(x-12y)(x+5y)$

19. $x^4 + 19x^2y^2 + 48y^4$ $(x^2+16y^2)(x^2+3y^2)$

20. $x^6 - 7x^3y^3 + 12y^6$ $(x^3-4y^3)(x^3-3y^3)$

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