Section 6.2 (Factoring Trinomials)

The objective for this section is to:

- Factor a polynomial where the coefficient in front of the x^2 term is a one
- Factor a polynomial where the coefficient in front of the x^2 term is NOT a one

Let's first explore why we factor the way we do, by multiplying a binomial times a binomial.

Factor (coefficient in front of the x^2 term is a ONE.

1. $x^2 + 11x + 28$

2. $x^2 + 9x + 18$

3. $a^2 - 11a + 30$

4. $x^2 + 4x - 21$

5. $x^2 - 4x - 21$

6. $x^3 - 8x^2 + 15x$

7. $p^2 - 5pq - 24q^2$

8. $y^2 + 8yz + 16z^2$

Factor (coefficient in front of the x^2 term is a NOT ONE.

9. $2x^2 + 5x + 3$

10. $7y^2 - 12y + 5$

11. $5z^2 - 16z + 3$

12. $6w^2 - 17w - 14$

13. $3n^2 - 20n + 20$

14. $6t^4 + t^2 - 12$

15. $12n^4 + 8n^2 - 15$

16. $10p^2 + 7pq - 12q^2$

17. $x^2 - 6xy + 9y^2 - 4z^2$

18. $r^2 - s^2 + 2st - t^2$

19. $wx^4 - 5wLx^3 + 6wL^2x^2$ used in beam design