

Factoring Polynomials

In Exercises 1–3, factor the polynomial. Use the X method

1. $x^2 + 5x + 6$

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

3. $z^2 + 11z + 28$

In Exercises 4–6, factor the polynomial. Use the X method and Box method

4. $6x^2 - 12x - 18$

5. $5x^2 - 15x - 50$

6. $9x^2 - 36x + 27$

7. Describe and **correct** the error in factoring the polynomial.

$\times \quad -2t^2 + 13t - 15 = (2t + 3)(t + 5)$

In Exercises 8 and 9, **solve** the equations. *****Remember, to solve set your factors equal to zero !!!

8. $4x^2 - 4x - 24 = 0$

9. $3p^2 - 5p - 28 = 0$