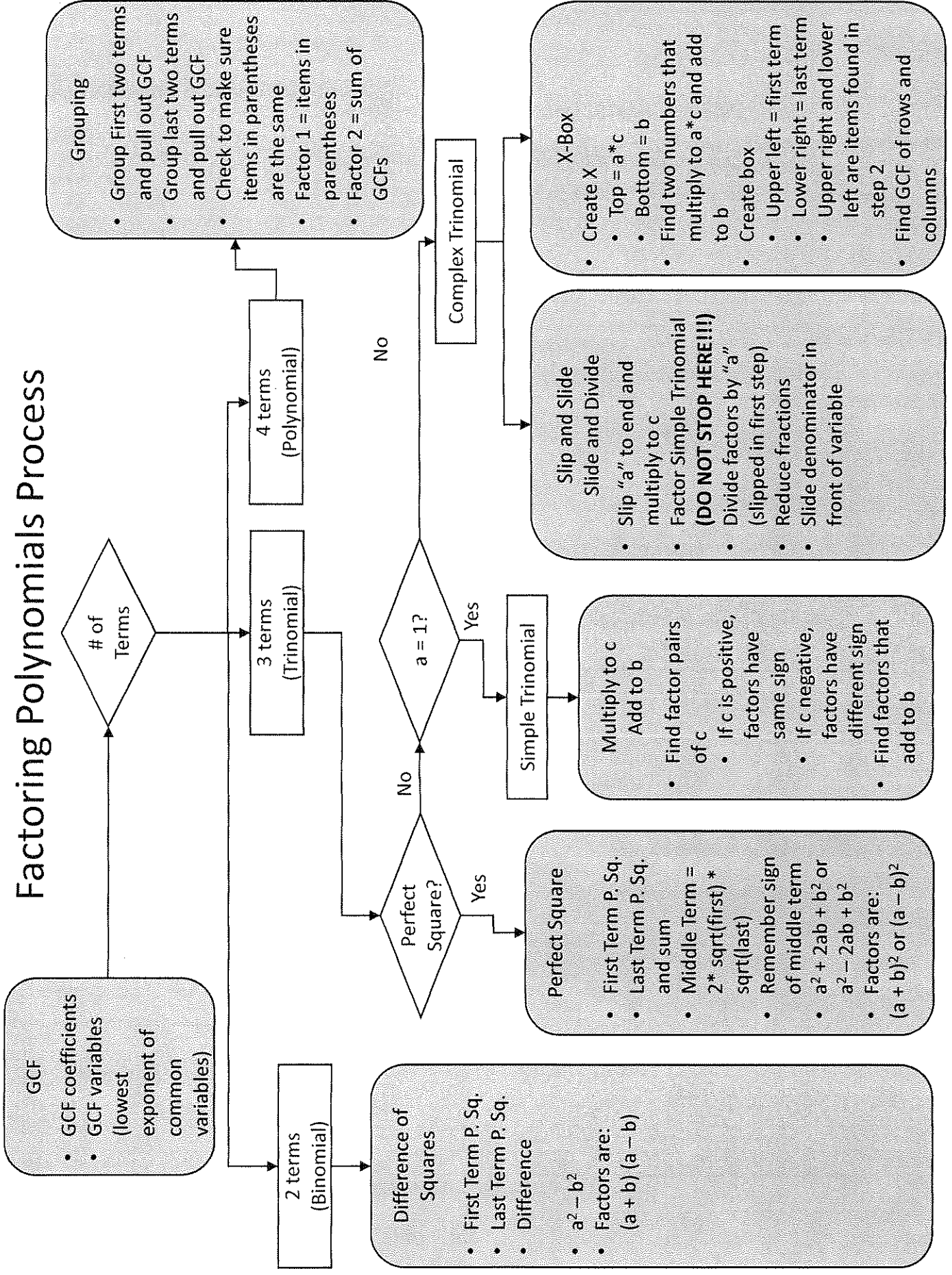
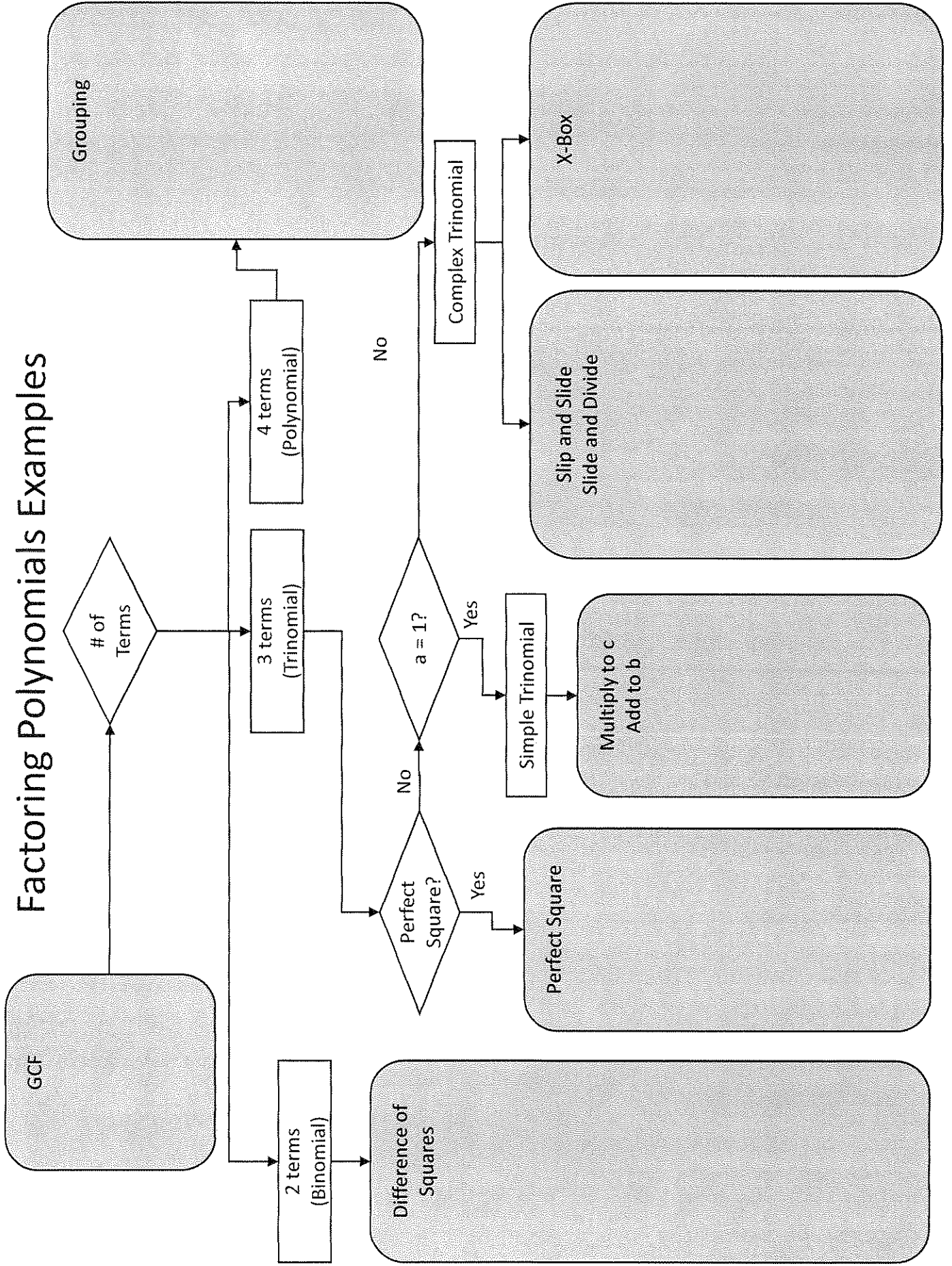


Factoring Polynomials Process



Factoring Polynomials Examples



Factoring Polynomials

Factor Completely. If the polynomial can't be factored, write PRIME.

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

2. $10x^2 + 13x - 3$

3. $9x^2 - 36$

4. $x^2 + 2x + 1$

5. $9x^2 + 48x + 64$

6. $9x^2 - 1$

7. $x^2 - 14x + 49$

8. $3y^2 + 24y + 45$

9. $16x^2 - 80x + 100$

10. $c^2 - 7c - 44$

11. $b^2 + 2b - 63$

12. $x^2 + 2xy - 8y^2$

13. $x^2 + 7x - 6$

14. $4c^2 - 16$

15. $x^3 + x^2 - 4x - 4$

16. $25n^2 - m^2$

17. The area in square centimeters of a square mat is $25x^2 - 10x + 1$. Find the dimensions of the mat.

18. The area of a rectangular cloth is $6x^2 - 19x - 85$ cm². The length is $2x + 5$ cm. Find the width.

Factoring GCF Practice

Directions: Factor the following polynomials using GCF. Use the bank at the bottom to help you solve.

1. $x^2 - 5x$

2. $3x - 12$

3. $2x^2 + 12x$

4. $x^2 + 3x$

5. $4x^3 + 4x$

6. $6x^2y - 2xy^2$

7. $8yx - 56y$

8. $x^3 - 2x^2$

9. $3x^2 - 12x$

10. $81 - 36xy$

11. $x^2y + 3x$

12. $5y^3 - 2y^2$

13. $36xy^2 - 48x^2y$

14. $75x^2y^3 + 60xy^6$

15. $6x^3y - 11xy$

16. $20x^2 - 16x^2y^2$

17. $34x^4y^3 - 17x^2y^5$

18. $35y^3x + 105y^2x^3$

Factoring by Grouping Practice

1) $8r^3 - 64r^2 + r - 8$

2) $12p^3 - 21p^2 + 28p - 49$

3) $12x^3 + 2x^2 - 30x - 5$

4) $6v^3 - 16v^2 + 21v - 56$

5) $63n^3 + 54n^2 - 105n - 90$

6) $21k^3 - 84k^2 + 15k - 60$

7) $25v^3 + 5v^2 + 30v + 6$

8) $105n^3 + 175n^2 - 75n - 125$