

Ch. 21 - BOARD PROBLEMS.

ADD

$$\begin{array}{r} \textcircled{1} \quad 7x^2 - 8x + 3 \\ \quad -2x^2 - 8x - 3 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad 3x^2 - 3x - 3 \\ \quad + 4x^2 + 4x + 4 \\ \hline \end{array}$$

MULTIPLY.

$$\begin{array}{r} \textcircled{3} \quad 3x - 1 \\ * \quad 8x + 7 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad 6x + 8 \\ * \quad 5x - 8 \\ \hline \end{array}$$

FOIL.

$$\textcircled{5} \quad (7x - 6)(5x + 6) =$$

$$\textcircled{6} \quad (8n + 1)(6x - 3) =$$

Ch. 21 - FACTORING TRINOMIALS

REMEMBER HOW TO FACTOR REGULARLY.

$$6x + 3 \text{ FACTORED} = \underline{\hspace{2cm}}$$

$$\text{BECAUSE } \underline{\hspace{1cm}} (\quad) = 6x + 3$$

REMEMBER FOIL:

$$(x + 3)(x - 6) = \underline{\hspace{2cm}}$$

FACTORING IS THE OPPOSITE OF FOIL.

$$\boxed{\text{EX 1}} \quad x^2 + 8x + 12$$

Ch. 21 - FACTORING TRINOMIALS

EX. 2

$$x^2 - 11x + 18$$

EX. 3

$$x^2 - x - 56$$

Name _____

Solve simultaneous equations by SUBSTITUTION.

$$\begin{aligned} 1. \quad X - 3y &= -6 \\ -4x + 9y &= 9 \end{aligned}$$

Solve simultaneous equations by ELIMINATION.

$$\begin{aligned} 2. \quad 2x + 8y &= 6 \\ -5x - 20y &= -15 \end{aligned}$$

$$\begin{aligned} 3. \quad 3 + 2x - y &= 0 \\ -3 - 7y &= 10x \end{aligned}$$

Factoring Trinomials (a = 1)

Factor each completely.

1) $b^2 + 8b + 7$

2) $n^2 - 11n + 10$

3) $m^2 + m - 90$

4) $n^2 + 4n - 12$

5) $n^2 - 10n + 9$

6) $b^2 + 16b + 64$

7) $m^2 + 2m - 24$

8) $x^2 - 4x + 24$

9) $k^2 - 13k + 40$

10) $a^2 + 11a + 18$

11) $n^2 - n - 56$

12) $n^2 - 5n + 6$

LESSON PRACTICE

21A

Build a rectangle and find the factors. Check by multiplying.

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

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

3. $x^2 + 11x + 10$

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

5. $x^2 + 8x + 7$

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

7. $x^2 + 12x + 11$

8. $x^2 + 7x + 6$

9. $x^2 + 9x + 14$

10. $x^2 + 16x + 15$

11. $x^2 + 3x + 2$

12. $x^2 + 4x + 3$

13. $x^2 + 9x + 8$

14. $x^2 + 19x + 18$

15. $x^2 + 9x + 20$

16. $x^2 + 10x + 21$