

Ch. 20 - BOARD PROBLEMS

write on one line

$$\textcircled{1} \frac{1}{8^{-4}} = \underline{\hspace{2cm}}$$

$$\textcircled{2} \frac{2}{A^{-2x}} = \underline{\hspace{2cm}}$$

Rewrite using positive exponents.

$$\textcircled{3} 7^{-4x} = \underline{\hspace{2cm}}$$

$$\textcircled{4} \frac{4}{2^{-2x}} = \underline{\hspace{2cm}}$$

SIMPLIFY

$$\textcircled{5} D^2 C^{-4} C^{-5} D^7 C^3 D^{-5} = \underline{\hspace{2cm}}$$

$$\textcircled{6} \left[(12^3)^5 \right]^2 = \underline{\hspace{2cm}}$$

$$\textcircled{7} (121)^3 = 11^{\underline{\hspace{1cm}}}$$

$$\textcircled{8} \begin{array}{l} 2x + 8y = 6 \\ -5x - 20y = -15 \end{array}$$

Ch. 20 - ADDITION & MULTIPLICATION OF POLYNOMIALS

$$\begin{array}{r} \textcircled{1} \quad x^2 + 2x + 4 \\ + \quad x^2 + 5x + 6 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad 2x^2 - x - 4 \\ + \quad x^2 + 6x + 6 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad 3x^2 + 5x - 6 \\ + \quad -x^2 - 6x + 7 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad 2x^2 + 7x - 8 \\ + \quad x^2 - 13x + 7 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{5} \quad x + 3 \\ * \quad x + 2 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{6} \quad x - 1 \\ * \quad x - 3 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{7} \quad 2x + 3 \\ * \quad x - 4 \\ \hline \end{array}$$

FOIL

$$\textcircled{8} \quad (x - 5)(x + 7)$$

$$\textcircled{9} \quad (2x + 3)(x - 7)$$

$$\textcircled{10} \quad (2x + 4)(x + 8)$$

$$\textcircled{10} \quad (x + 8)(x - 3)$$

Name _____

Solve simultaneous equations by SUBSTITUTION.

1. $y = x - 1$
 $2x - 3y = -1$

Solve simultaneous equations by ELIMINATION.

2. $7x + 2y = 24$
 $8x + 2y = 30$

3. $3x - 9y = -18$
 $5x + 4y = -30$

LESSON PRACTICE

20A

Build.

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

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

3. $x^2 - 8$

Build and add.

4.
$$\begin{array}{r} x^2 - 6x + 3 \\ + 3x^2 + 7x - 9 \\ \hline \end{array}$$

5.
$$\begin{array}{r} x^2 - 8 \\ + x^2 + 6x - 7 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 2x^2 + 10x + 7 \\ + 2x^2 - 8x - 9 \\ \hline \end{array}$$

Build a rectangle and find the area (product).

7. $(x + 1)(x + 2) =$

8. $(x + 4)(x + 3) =$

9. $(x + 1)(x + 5) =$

Multiply.

$$\begin{array}{r} 10. \quad 3X + 2 \\ \times \quad X + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 5X + 5 \\ \times \quad X + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 2X + 1 \\ \times \quad X + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad X + 8 \\ \times \quad 3X + 5 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad X + 3 \\ \times \quad 2X + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 3X + 2 \\ \times \quad 2X + 1 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 4X + 2 \\ \times \quad X + 3 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 2X - 5 \\ \times \quad X + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 3X + 5 \\ \times \quad 3X - 1 \\ \hline \end{array}$$