

# CHAPTER 15 BOARD PROBLEMS

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SOLVE BY SUBSTITUTION (X, Y)

$$\begin{aligned} \textcircled{1} \quad y &= 5x - 7 \\ -3x - 2y &= -12 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad -4x + y &= 6 \\ -5x - y &= 21 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad 2x + y &= 20 \\ 6x - 5y &= 12 \end{aligned}$$

# Ch. 15 NOTES - SOLVE w/ELIMINATION

GOAL: \_\_\_\_\_

$$\begin{array}{r} \textcircled{1} \quad X + Y = 3 \\ 2X - Y = 3 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad Y - X = 0 \\ Y - 3X = 4 \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad Y = -X - 3 \\ Y = 2X + 3 \end{array}$$

## Ch. 15 - NOTES

$$\begin{aligned} \textcircled{4} \quad -4x - 2y &= -12 \\ 4x + 8y &= -24 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x - y &= 11 \\ 2x + y &= 19 \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad 5x + y &= 9 \\ 10x - 7y &= -18 \end{aligned}$$

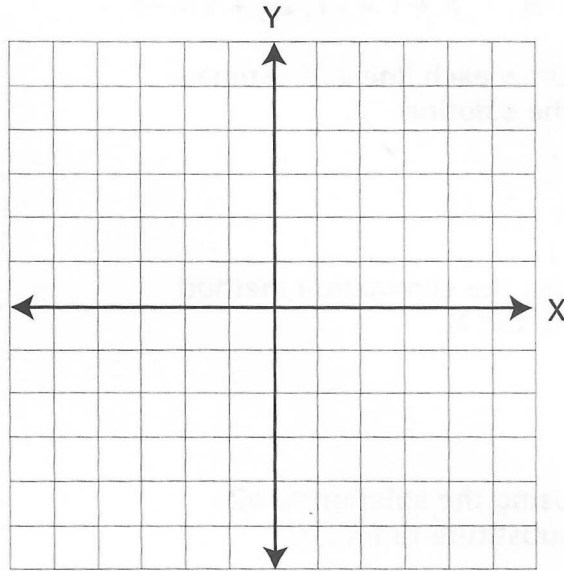
$$\begin{aligned} \textcircled{7} \quad -7x - 8y &= 9 \\ -4x + 9y &= -22 \end{aligned}$$

**For #7-9**  $X - Y = 5$ ,  $2X + Y = 7$

7. Draw each line and estimate the solution.

8. Use the elimination method to find X.

9. Using the solution to #8, substitute to find Y.



**For #10**  $4X + Y = 6$ ,  $2X + 3Y = 18$

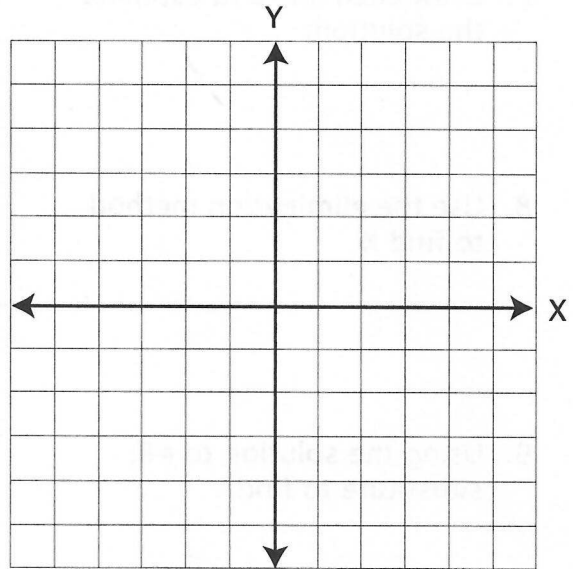
10. Use the elimination method to solve the equations.

## LESSON PRACTICE

Follow the directions for each set of equations.

**For #1-3**  $X + Y = -1$ ,  $2X + Y = -4$

1. Draw each line and estimate the solution.
2. Use the elimination method to find X.
3. Using the solution to #2, substitute to find Y.



**For #4-6**  $X + Y = -2$ ,  $3X - Y = -2$

4. Draw each line and estimate the solution.
5. Use the elimination method to find X.
6. Using the solution to #5, substitute to find Y.

