

Worksheet 7.1 – Solving Linear Systems by Graphing – Textbook pages 398-403

LEVEL 1

Decide whether the ordered pair is a solution of the system of linear equations. (YES or NO)
Show your work.

1) (1, 1)

$$\begin{aligned} 2x + y &= 3 \\ x - 2y &= -1 \end{aligned}$$

2) (2, 4)

$$\begin{aligned} 4x + y &= -4 \\ -x - y &= 1 \end{aligned}$$

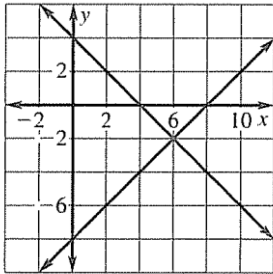
3) (-5, -2)

$$\begin{aligned} x - y &= 3 \\ 3x - y &= 11 \end{aligned}$$

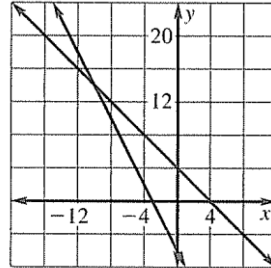
LEVEL 2

Use the graph to solve the linear system. Check your solution. Show your work.

4) $-x + y = -8$
 $x + y = 4$



5) $4x + 2y = -12$
 $2x + 2y = 8$



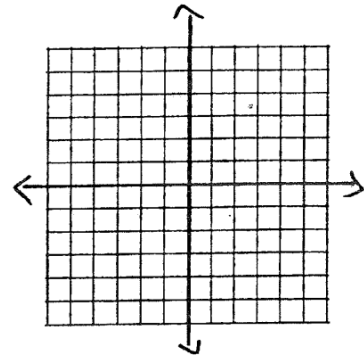
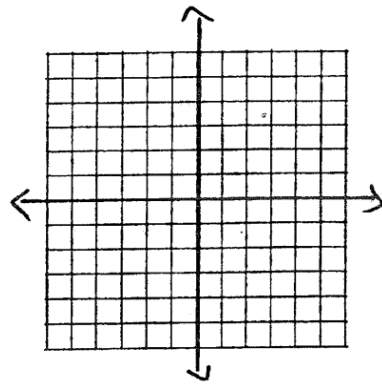
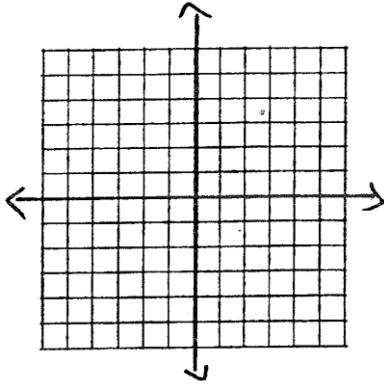
LEVEL 3

Graph and check to solve the linear system. Show work when necessary.

6) $x = 6$
 $y = -3$

7) $y = x - 2$
 $y = -x - 4$

8) $-3x + y = 6$
 $-x + y = -2$



LEVEL 4

9) You bought 20 one gallon containers of chocolate ice cream and vanilla ice cream for your family reunion. The chocolate ice cream was on sale for \$5.75 a gallon and the vanilla ice cream was \$5.25 per gallon. You spent \$109. How many gallons of each type of ice cream did you buy? (Hint: Write one equation for the total number of gallons of ice cream and another equation for the total price. Then graph.)

