## Warm Up

Do the two problems on the worksheet (p.79) on the table

# Are you the solution?

# Homework Questions?

2) $5x + 2y = 4$

$9x + 2y = 12$

$-9x \quad -9x$

$\frac{2y}{2} = \frac{-9x+12}{2}$

$y = \frac{-9}{2}x + 6$

$5x+2y=4$

$-5x \quad -5x$

$\frac{2y}{2} = \frac{-5x+4}{2}$

$y = \frac{-5}{2}x + 2$

$m = -\frac{5}{2}$ $b = 2$

$(2, -3)$

$x \; y$

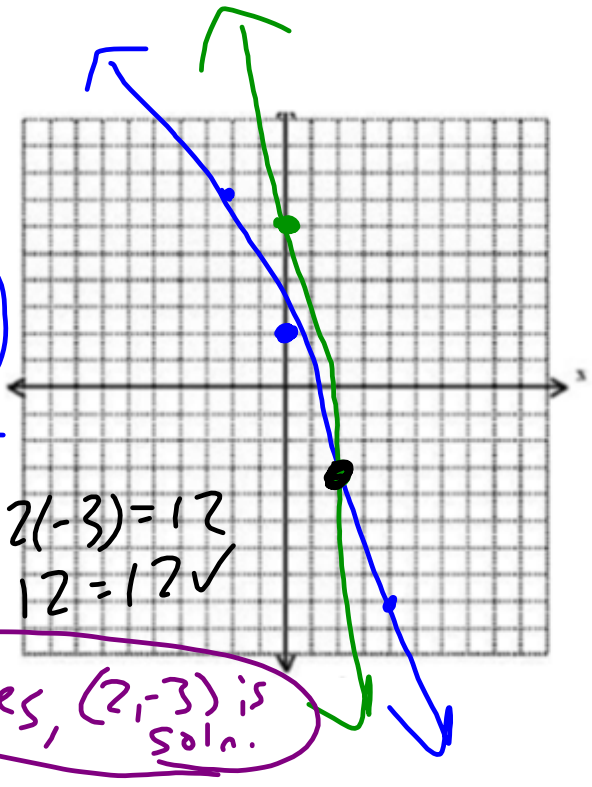
$5(2)+2(-3)=4$

$4=4$ ✓

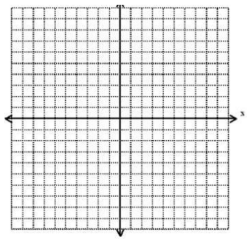
$9(2)+2(-3)=12$

$12=12$ ✓

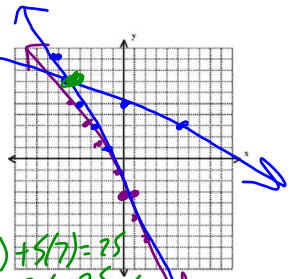
∴ yes, $(2,-3)$ is soln.



2) 5x + 2y = 4
9x + 2y = 12



3) y = -2x – 3 m=-2 b=-3
2x + 5y = 25



$-2x \quad -2x$

$\frac{5y}{5} = \frac{-2x+25}{5} \quad \frac{5}{5}$

$y = \frac{-2}{5}x + 5$ $m = -\frac{2}{5}$ $b = 5$

(-5,7) x y

$7 = -2(-5) - 3$

$7 = 7$ ✓

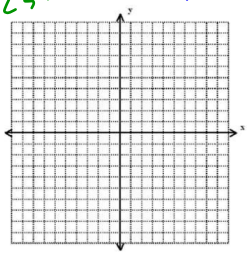
$2(-5) + 5(7) = 25$

$-10 + 35 = 25$

$25 = 25$ ✓

4) y = 3x + 4
7x – 3y = -6

∴ yes, (-5,7) is soln.





4) y = 3x + 4 m=3 b=4

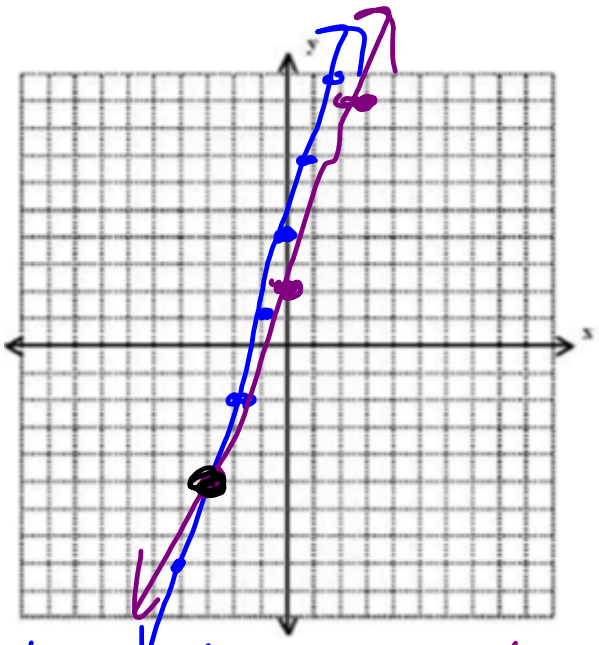
7x – 3y = -6

$-7x \quad -7x$

$\frac{-3y}{-3} = \frac{-7x-6}{-3} \quad \frac{-3}{-3}$

$y = \frac{7}{3}x + 2$

m=7/3 b=2



(-3,-5) x y

$-5 = 3(-3) + 4$

$-5 = -5$ ✓

$7(-3) - 3(-5) = -6$

$-6 = -6$ ✓

∴ yes, (-3,-5) is soln.

## Summary

**EQ:** What are the steps to solve a system by graphing?

x=# ↕

y=# ↔

1) y=mx+b

2) Graph m= b=

3) pt of intersect (x,y)

4) ✓ pt in original eqns

# 7.1 Homework

Finish Solving Systems by Graphing wkst #1-20