5- Minute Check

Please open your books to page 123 and complete problems #1-13

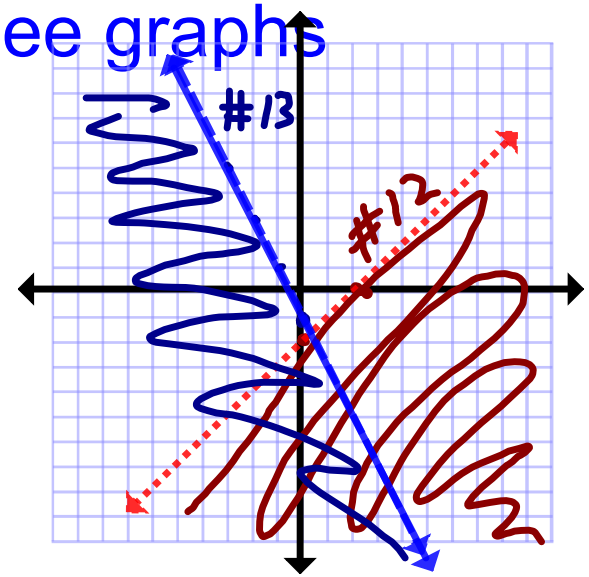
Answers p. 123

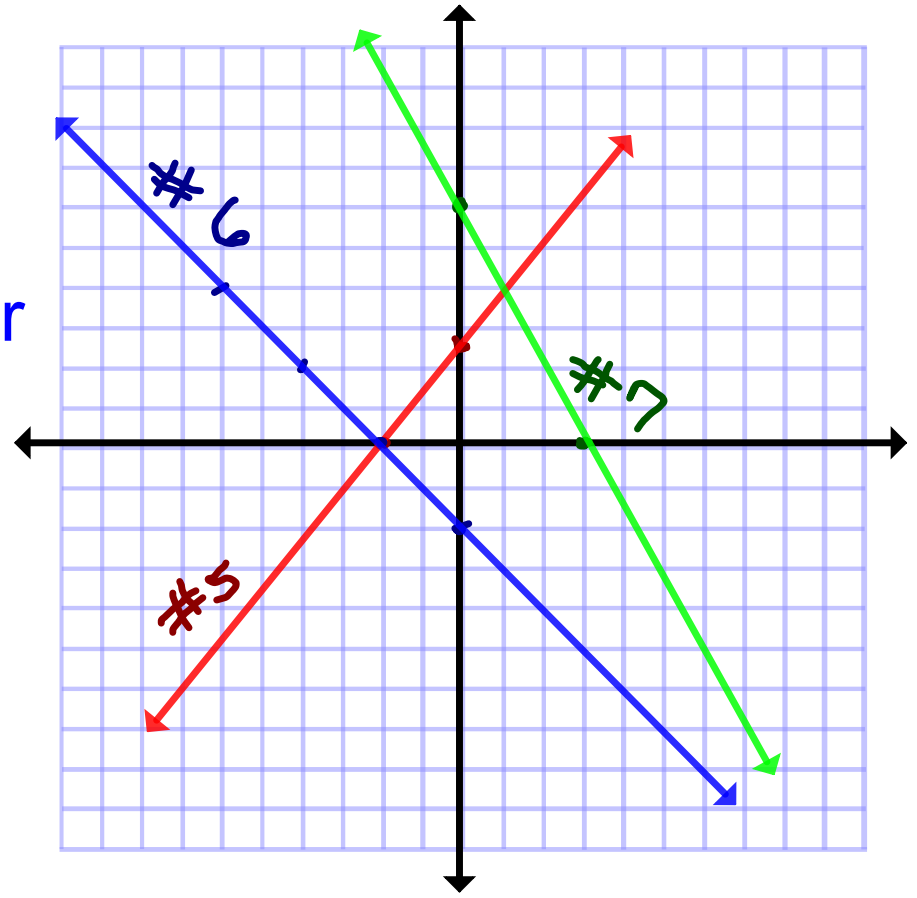
1. y= -6 + 3/2 x
2. y = -x
3. y = 2x +18
4. y = 2/3 - 3/2 x

5, 6, 7 see graph

8. -1, 1 perpendicular
9. -2/3, 2/3 neither
10. 1/4, 1/4 parallel
11. -2/3, 3/2 perpendicular

12, 13 see graphs



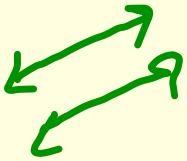


3-1
Graphing Systems of Linear Equations

System of Equations-
solving for a common solution
to more than one equation

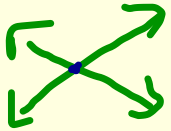
Types of Systems:

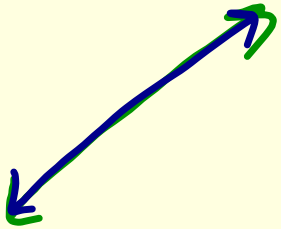
Inconsistent system- has no solution (parallel lines)



Consistent system- has at least one solution

a) Independent- 1 solution
b) Dependent- infinite solutions





Example 1: Solve by graphing:

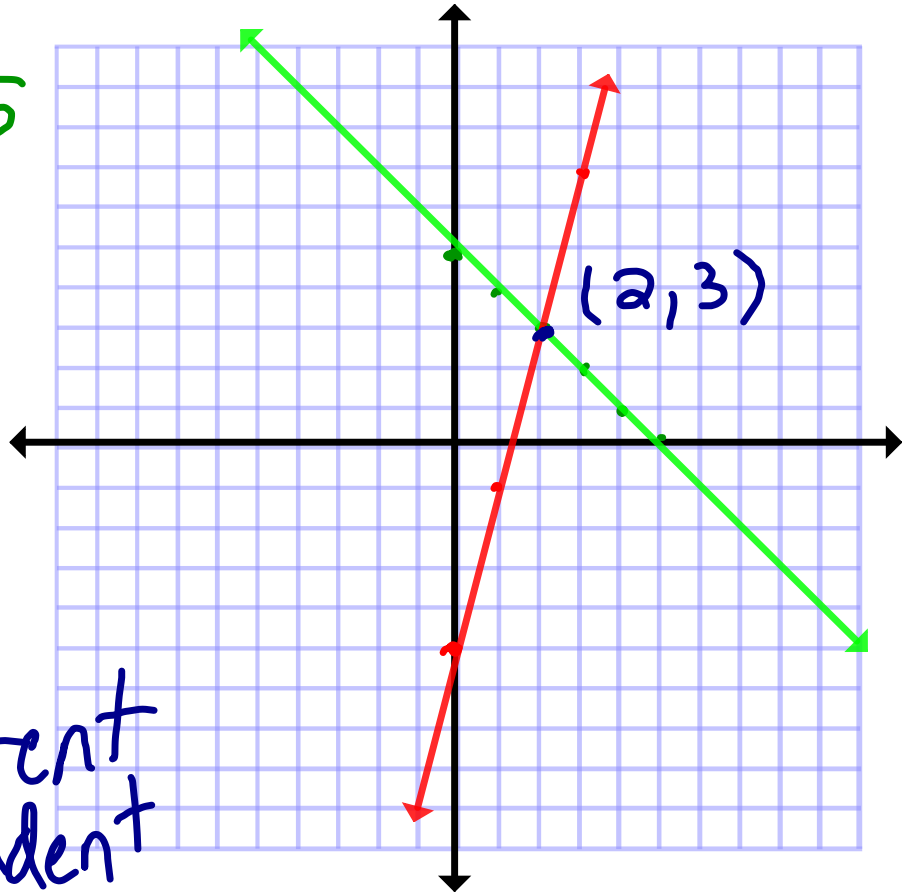
A) $y = -x+5$ $m=\frac{-1}{1}$ $b=5$

B) $\frac{-2y}{-2} = \frac{-8x}{-2} + \frac{10}{-2}$

$y = 4x - 5$

$m=\frac{4}{1}$ $b=-5$

consistent
independent



Example 2:
Solve by graphing:

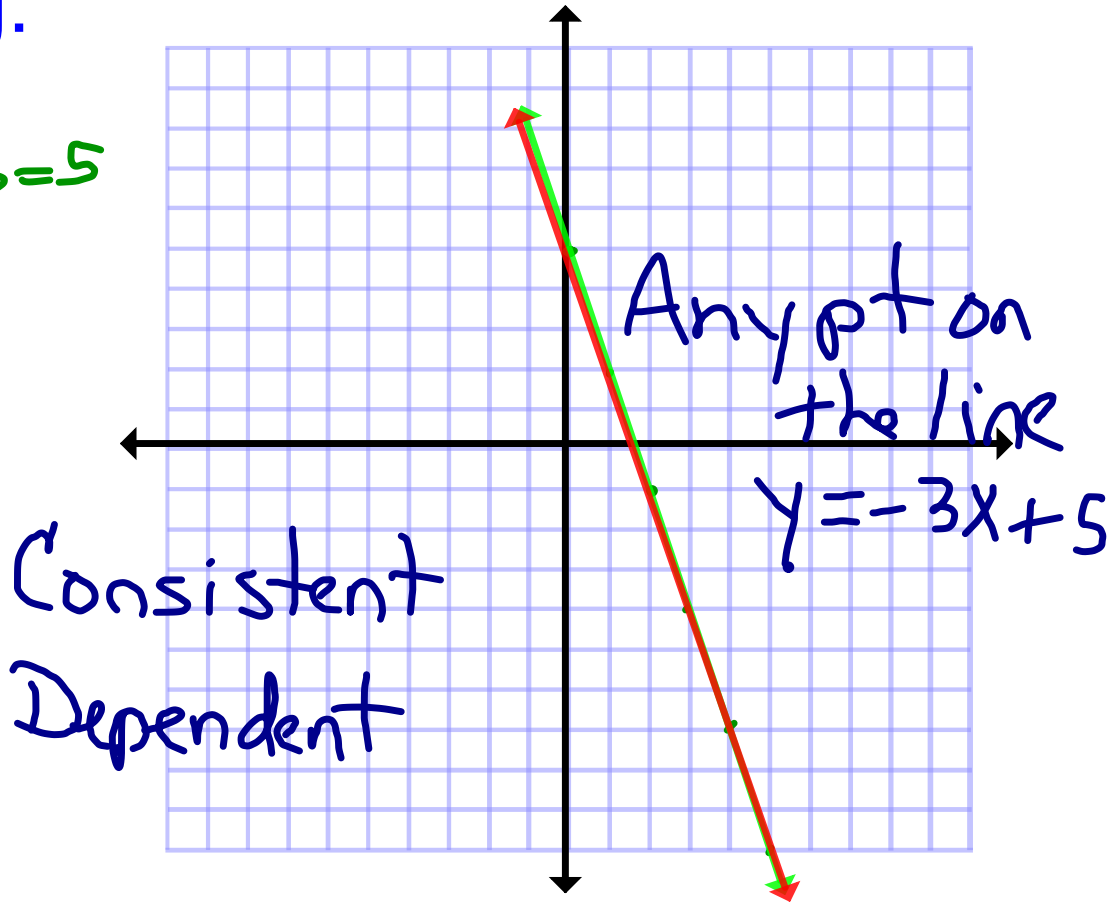
A) $y = -3x + 5$ $m = \frac{-3}{1}$ $b = 5$

B) $9x + 3y = 15$

$3y = -9x + 15$

$y = -3x + 5$

(same line)



Example 3:
Solve by graphing:

A) $x + y = 6$

B) $3x - 4y = 4$

$x + y = 6$

$y = -x + 6$

$m = \frac{-1}{1}$ $b = 6$

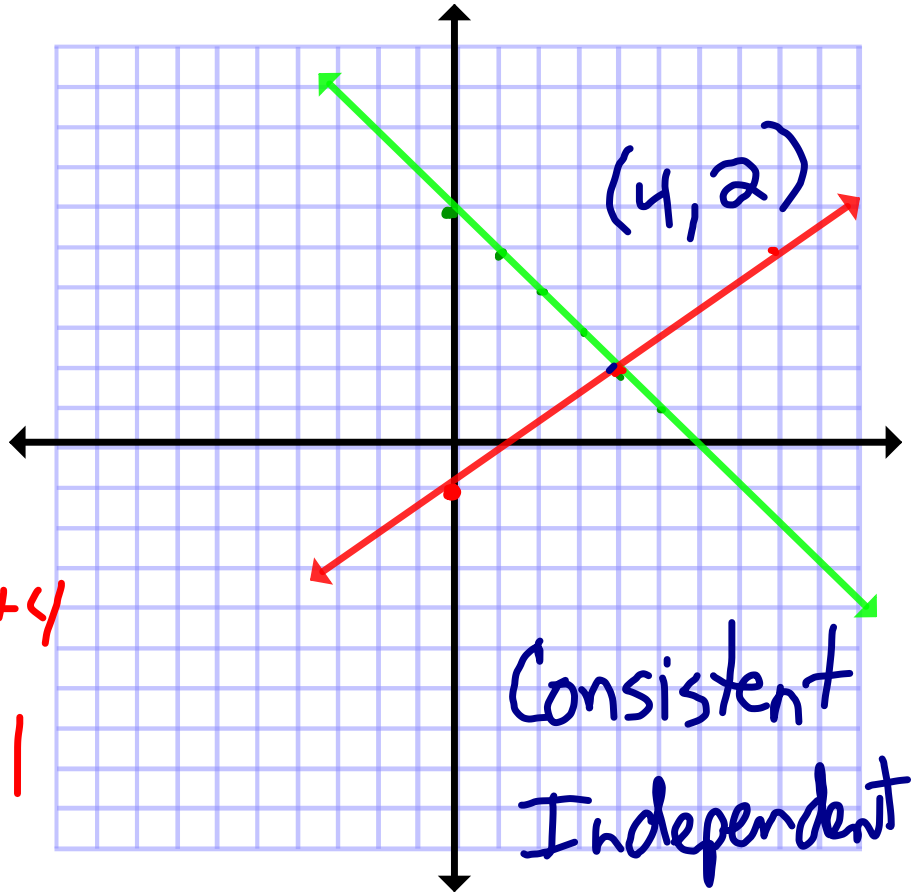
$3x - 4y = 4$

$-4y = -3x + 4$

$y = \frac{3}{4}x - 1$

$m = \frac{3}{4}$

$b = -1$



Example 4:
solve by graphing:

A) $4x + 6y = 18$

B) $6x + 9y = 18$

$6y = -4x + 18$

$y = -\frac{4}{6}x + 3$

$m = \frac{-4}{6} = \frac{-2}{3}$

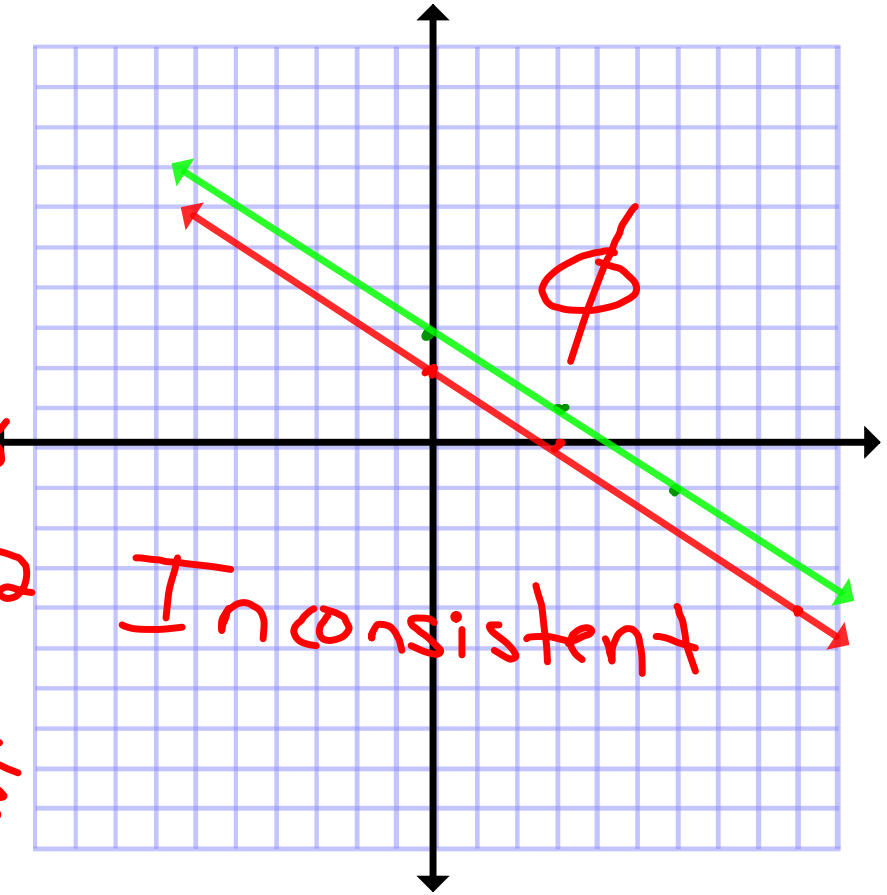
$b = 3$

$9y = -6x + 18$

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

$m = \frac{-6}{9} = \frac{-2}{3}$

$b = 2$



Assignment:
Begin now
p.130
#13-25