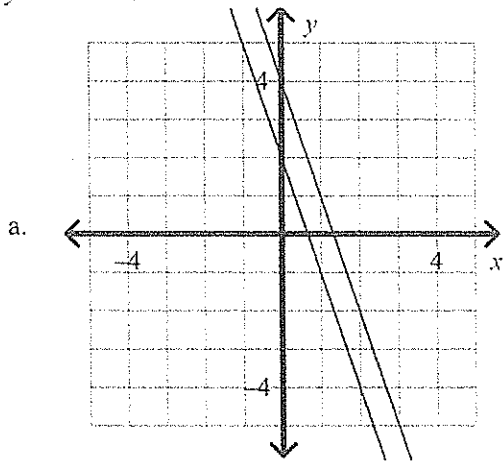


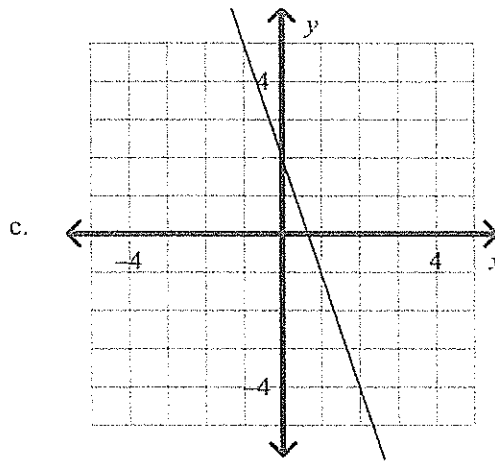
Algebra Mid Unit Study Guide

What is the solution of the system? Use a graph.

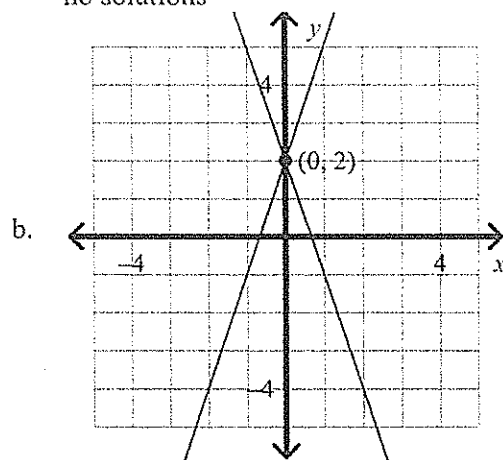
1. $y = -3x + 2$
 $y = -3x + 4$



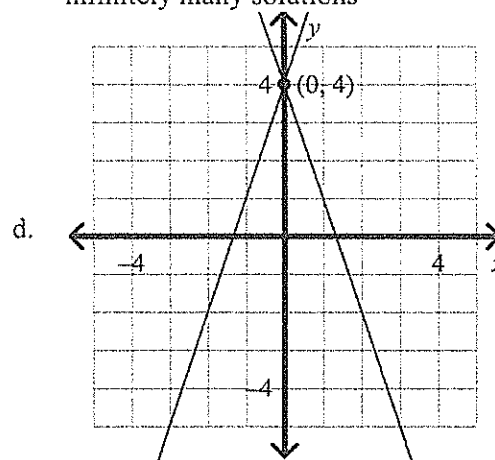
no solutions



infinitely many solutions



(0, 2)

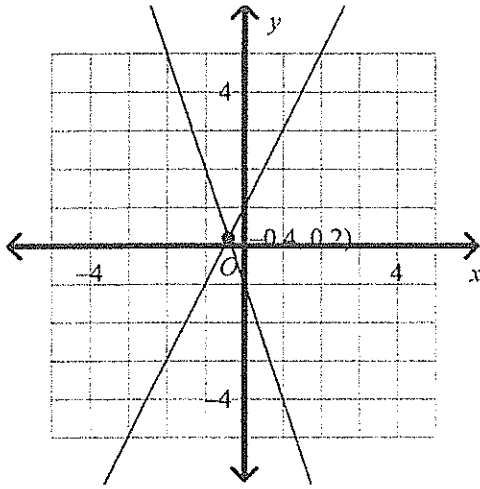


(0, 4)

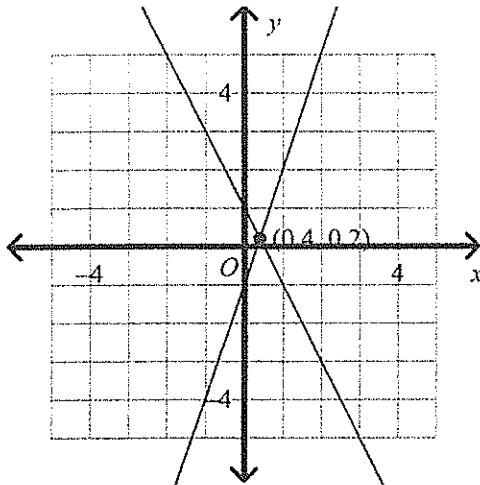
What is the solution of the system? Use a graph.

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

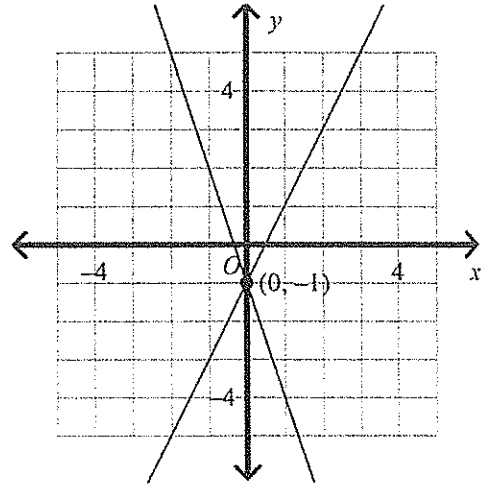
a.



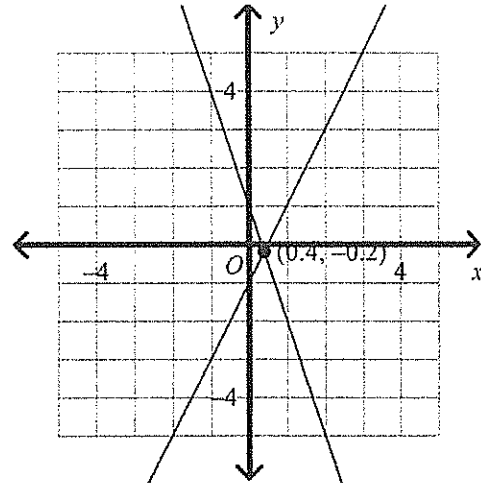
b.



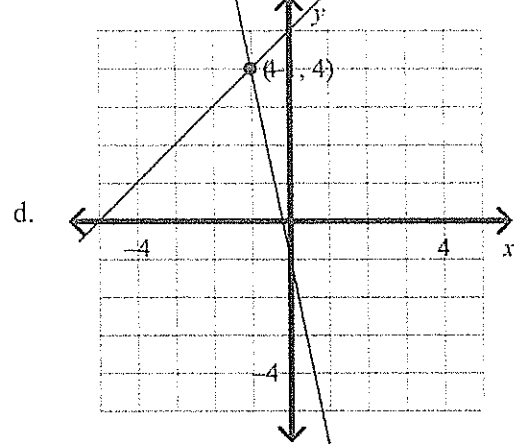
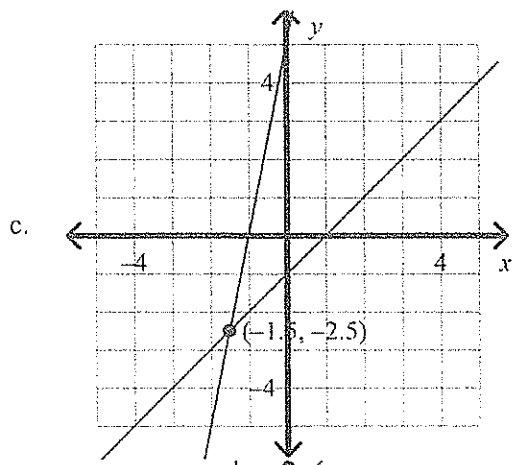
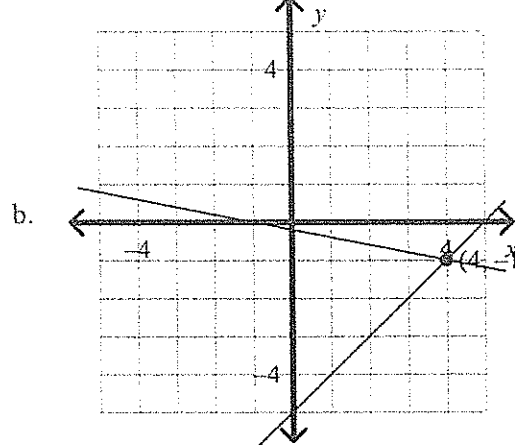
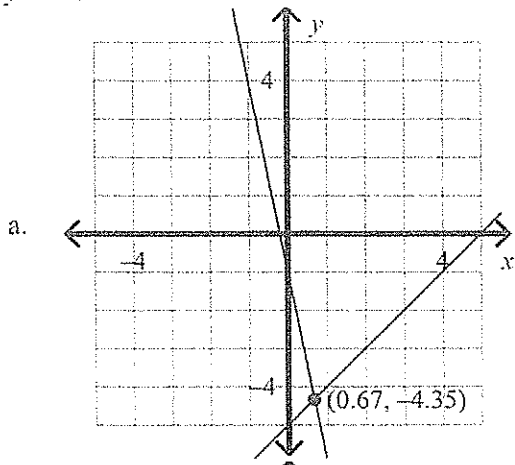
c.



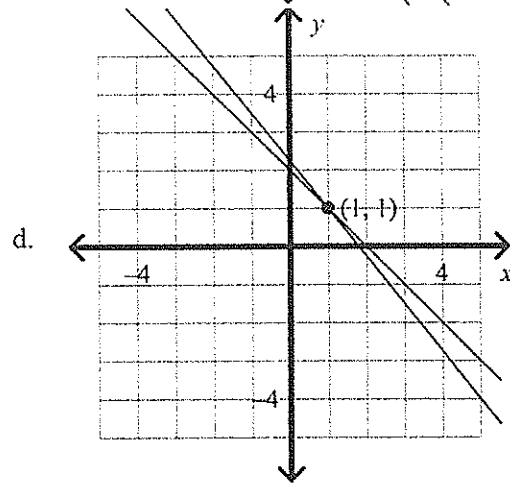
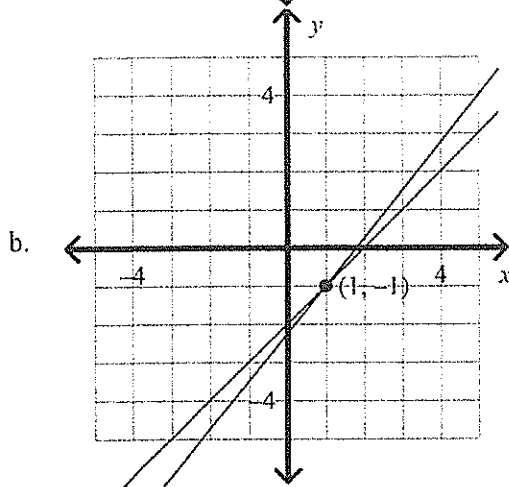
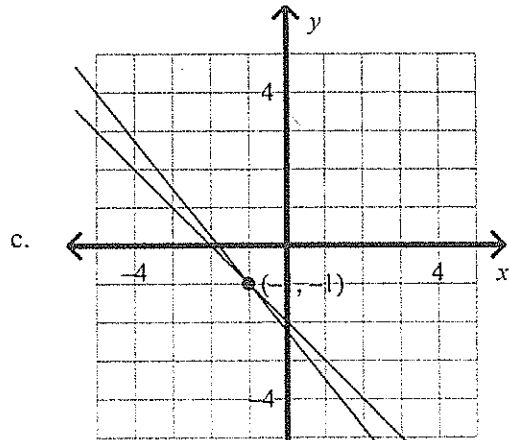
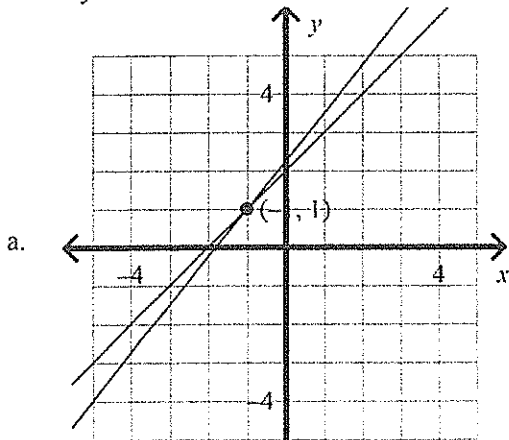
d.



3. $y = x + 5$
 $y = -5x - 1$



4. $5x + 4y = 9$
 $4x + 4y = 8$



What is the solution of the system? Use substitution.

5. $y = x + 6$
 $y = 2x$

- a. (6, 12) b. (-12, -6) c. (-6, -12) d. (2, 4)

6. $3x + 2y = 7$
 $y = -3x + 11$

- a. (6, -3) b. (6, -7) c. $\left(-4, \frac{19}{2}\right)$ d. (5, -4)

____ 7. $3y = -\frac{1}{2}x + 2$

$y = -x + 9$

a. (3, 6)

b. (20, -4)

c. (10, -1)

d. (-1, 8)

What is the solution of the system? Use substitution.

____ 8. $2x - y = -7$

$4x - y = -4$

a. (-1.5, 4)

b. (1.5, 10)

c. (4, -1.5)

d. (-1.5, -2)

____ 9. $8x - 2y = 10$

$3x - y = 9$

a. (-4, -21)

b. (2, 3)

c. (-2, -12)

d. (2, -3)

____ 10. $x - y = -6$

$6x - 3y = -9$

a. (1, 7)

b. (3, 9)

c. $\left(-6, \frac{3}{2}\right)$

d. (4, -11)

How many solutions does the system have?

____ 11. $x = -4y + 4$

$2x + 8y = 8$

a. one solution

c. infinitely many solutions

b. two solutions

d. no solution

What is the solution of the system? Use elimination.

____ 12. $2x - 2y = -8$

$x + 2y = -1$

a. (-14, 1)

b. (1, 5)

c. (-3, 1)

d. (0, 4)

_____ 13. $5x + 4y = -2$
 $x - 4y = 14$
a. $(3, -4.3)$ b. $(-3, 2)$ c. $(2, -3)$ d. $(4, 1)$

_____ 14. $-12x - y = 6$
 $17x + y = 4$
a. $(-30, 2)$ b. $(-2, 30)$ c. $(2, -30)$ d. $(30, -2)$

_____ 15. $3x - 4y = 9$
 $-3x + 2y = 9$
a. $(3, 9)$ b. $(-27, -9)$ c. $(-3, -6)$ d. $(-9, -9)$

What is the solution of the system? Use elimination.

_____ 16. $5x + 8y = -29$
 $7x - 2y = -67$
a. $(-7, 9)$ b. $\left(-10, \frac{21}{8}\right)$ c. $(-1, -3)$ d. $(-9, 2)$

_____ 17. $3x - 4y = -24$
 $x + y = -1$
a. $(-4, 3)$ b. $(0, 6)$ c. $(3, 4)$ d. $(4, 3)$

What is the solution of the system? Use elimination.

_____ 18. $5x + 7y = 32$
 $8x + 6y = 46$
a. $(8, 5)$ b. $(1, 5)$ c. $(7, 0)$ d. $(5, 1)$