

Mathematics 2 ESO - Unit 8 (SYSTEMS OF
LINEAR EQUATIONS)

Page 87 - Activity 45 (b7)



1) Which of these pairs of values is a solution to the equation

$$2x - 3y = -7$$

- a) $x = 4 ; y = 1$ c) $x = -1 ; y = 0$
b) $x = -2 ; y = 1$ d) $x = 0 ; y = 0$

2) Which of these pairs of values is a solution to equation $-x + y = 1$

- a) $x = 4 ; y = 1$ c) $x = -1 ; y = 0$
b) $x = -2 ; y = 1$ d) $x = 0 ; y = 0$

3) Give five possible solutions to the equation $2x + 3y = 5$

4) Complete the table with solutions to equation: $x - 3y = 2$

x						10	9	-4	0	1
y	6	7	-8	12	10					

5) Complete the table with solutions to equation $x - 3y = 2$ and draw the graph.

x	-4	-3	-2	-1	0	1	2	3	4
y									

6) Draw:

- a) $4x - 4y = 6$
b) $-x - 9y = 0$
c) $-3x + 7y = 3$
d) $x + 15y = 8$

7) Draw the graph and write the solution:

- a) $2x - y = 6 ; -x + y = 3$
b) $-x - 4y = 5 ; 6x - 7y = 7$
c) $-2x + 7y = 9 ; -2x + 3y = 0$
d) $x + 4y = 6 ; -5x + 5y = 15$

8) Solve by substitution and then check the solution:

- a) $x - 4y = 3$; $x + 8y = 3$
- b) $-x - 4y = -5$; $2x - 4y = -2$
- c) $2x + y = 4$; $-5x + 3y = 1$
- d) $3x + y = 9$; $-12x + y = -21$

Solutions activity 8
a. $x=3$; $y=0$
b. $x=1$; $y=1$
b. $x=1$; $y=2$
b. $x=2$; $y=3$

9) Solve by substitution:

- a) $x - 2y = -1$; $x + 8y = 9$
- b) $-x - 4y = 6$; $x - 4y = 10$
- c) $-2x + 7y = 0$; $-5x + 3y = 0$
- d) $x + 4y = -7$; $-2x + 3y = -8$

Solutions activity 9
a. $x=1$; $y=1$
b. $x=2$; $y=-2$
b. $x=0$; $y=0$
b. $x=1$; $y=-2$

10) Solve by elimination:

- a) $2x - 6y = -4$; $-x + 2y = 1$
- b) $-3x - 4y = -14$; $x - 7y = -12$
- c) $-2x + 7y = 6$; $-2x + 3y = 0$
- d) $2x + 4y = -8$; $-2x + y = -2$

Solutions activity 10
a. $x=1$; $y=1$
b. $x=2$; $y=2$
b. $x=3$; $y=0$
b. $x=0$; $y=-2$