

Systems Special Cases Worksheet

One Solution	No Solution	Many Solutions
When you can find the x and the y.	When the variables cancel and the two sides DON'T equal each other.	When the variables cancel and the two sides ARE equal.

Solve using Elimination.

$$\begin{array}{l} 1) \quad x + 4y = -14 \\ \quad -x - 4y = 14 \end{array}$$

$$\begin{array}{l} 2) \quad -3x + 5y = 8 \\ \quad -3x + 5y = 5 \end{array}$$

$$\begin{array}{l} 3) \quad 18x + 3y = 6 \\ \quad 18x + 9y = -18 \end{array}$$

Solve using Substitution.

$$\begin{array}{l} 4) \quad y = 7x \\ \quad 14x - 2y = 2 \end{array}$$

$$\begin{array}{l} 5) \quad y = -3x + 6 \\ \quad 6x + 2y = 12 \end{array}$$

$$\begin{array}{l} 6) \quad 5x + 6y = 10 \\ \quad y = -2x + 4 \end{array}$$

7) Write a system of equations that would have no solutions:

8) Write a system of equations that would have many solutions:

Number Search Puzzle #002

DIRECTIONS: Find the numbers in the list below the grid. The numbers can be in any direction: backwards, forwards, up, down, or diagonally.

0	3	6	6	5	8	5	8	2	9	3	3	8	6	3
9	7	6	1	5	4	6	0	6	5	6	3	3	8	2
9	8	2	7	8	5	4	6	9	5	0	7	1	4	7
6	2	5	7	6	6	9	6	4	4	8	6	2	0	0
5	6	4	6	6	5	0	4	6	5	4	2	8	0	6
3	8	4	8	4	5	1	3	8	9	3	0	0	9	8
4	6	1	2	8	4	3	7	5	9	8	3	3	5	0
9	7	6	5	9	6	2	6	5	3	7	3	6	0	6
4	9	2	2	1	5	7	5	0	8	9	5	8	8	4
1	7	7	2	6	9	9	1	3	5	5	9	5	4	9
4	4	9	0	2	5	8	7	3	4	9	4	3	5	2
6	7	9	1	0	0	2	4	6	8	8	7	8	4	8
6	2	8	0	3	8	6	8	3	6	9	4	3	2	3
3	1	6	1	3	0	3	9	1	7	8	2	6	5	7
3	1	2	7	9	5	4	4	4	5	9	7	2	1	4

128036

132798

170596

247495

257669

274797

376203

389980

400950

414663

438795

456405

466855

473829

488671

489151

524548

606563

608607

626528

638358

658582

689972

782657

826867

855033

865664

868369

954445

989895