

LESSON 5.3 • Solving Systems of Equations Using Elimination

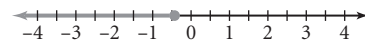
- $y = 7$
 - $y = -6.5$
 - $x = 0$
 - $x = -7$
- $y = 3\frac{1}{3}$
 - $y = -3\frac{1}{3}$
 - $x = -4.5$
 - $x = 8$
- $(-1, -1)$
 - $(2, -1)$
 - $(-2, -3)$
 - $(-3, -1)$
 - $(2, -2)$
 - $(4, 2)$
 - $(-2, 4)$
 - $(-2, -1)$
 - $(0.5, -0.\bar{3})$
 - $(2, 2)$
 - $(-2, -1)$
 - $(2, -2)$
 - $(1, -3)$
 - $(2, 0)$
 - $(-3, -4)$
- $0 = 0$; This is always true. There are an infinite number of solutions.
 - Explanations will vary. Sample explanation: The two equations are equations for the same line. Their intersection is the entire line. Every ordered pair that satisfies one equation also satisfies the other.
- $0 = 4$ (or some other false statement); This is never true. There is no solution.
 - The explanations may vary. Sample explanation: The equations are equations of parallel lines. They never intersect. There is no ordered pair that satisfies both equations.

LESSON 5.4 • Solving Systems of Equations Using Matrices

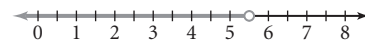
- $$\begin{cases} 2.5x - 7y = 3 \\ 4x - 3.25y = 17 \end{cases}$$
 - $$\begin{cases} 4x + 2y = 0 \\ -3x + 5y = 11 \end{cases}$$
- $$\begin{cases} \frac{3}{5}x - 2y = \frac{7}{5} \\ \frac{1}{5}x + \frac{4}{5}y = -3 \end{cases}$$
- $$\begin{bmatrix} 1 & -2 & 11 \\ 3 & -1 & 7 \end{bmatrix}$$
 - $$\begin{bmatrix} 0.9 & 1.2 & 2.4 \\ -1.5 & 2.4 & 1.8 \end{bmatrix}$$
 - $$\begin{bmatrix} -1 & 1 & 4 \\ 1 & 1 & 1 \end{bmatrix}$$
- $(-1, 1)$
 - $(13.5, 9.25)$
 - $(-\frac{12}{19}, -\frac{21}{38})$
- $$\begin{bmatrix} 1 & 0 & -3.2 \\ 0 & 1 & 0.4 \end{bmatrix}; (-3.2, 0.4)$$
- $3x - y = 2, 5x + y = 6$
 - $$\begin{bmatrix} 3 & -1 & 2 \\ 5 & 1 & 6 \end{bmatrix}$$
- $$\begin{bmatrix} 3 & -1 & 2 \\ 5 & 1 & 6 \end{bmatrix}$$
 Original matrix.
 - $$\begin{bmatrix} 8 & 0 & 8 \\ 5 & 1 & 6 \end{bmatrix}$$
 Add row 2 to row 1.
 - $$\begin{bmatrix} 1 & 0 & 1 \\ 5 & 1 & 6 \end{bmatrix}$$
 Divide row 1 by 8.
 - $$\begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 1 \end{bmatrix}$$
 Multiply row 1 by -5 and add it to row 2.
- $(1, 1)$

LESSON 5.5 • Inequalities in One Variable

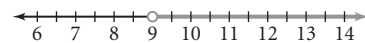
- Add 3; $7 < 11$
 - Subtract 5; $-8 < -7$
 - Multiply by -2 ; $-10 < 18$
 - Multiply by 5; $-20 > -35$
 - Multiply by -2 ; $-2m \geq -12$
 - Subtract 8; $w - 8 > -9$
- Answers will vary, but the values must be > -3 .
 - Answers will vary, but the values must be ≤ 7 .
 - Answers will vary, but the values must be ≥ -7.7 .
 - Answers will vary, but the values must be > 1 .
 - Answers will vary, but the values must be ≤ 2.8 .
 - Answers will vary, but the values must be < -5 .
- $x \geq -5$
 - $x < 1$
 - $15 < x \leq 19$
 - $-1 < x < 4$
 - $x \leq -6$
 - $-8 \leq x < -4$
- $x \leq 11$
 - $y \geq -3$
 - $t \leq 27$
 - $m \geq 6$
- $x \leq -0.43$



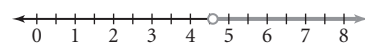
- $x < 5.5$



- $x > 9$

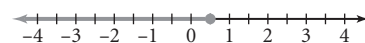


- $x > 4.6$



- No solution

- $x \leq 0.5$



LESSON 5.6 • Graphing Inequalities in Two Variables

- i
 - iv
 - ii
 - iii
- $y > 3 + \frac{2}{3}x$
 - $y \leq 1.5x + 4$
 - $y < \frac{3}{4}x$
- a-c.

