Time Remaining

Bell Ringer ~ Date

Get your bell ringer sheet, calculator and clicker

Determine if the points are solutions of the equation

$y = -3x + 2$

(Hint: plug in points, is equation equal?)

Answer yes or no.

You ***MUST*** show your work.

1. (5, -13)
2. (-2, 8)
3. (-3, 7)

Bell Ringer Answers

$y = -3x + 2$

(Hint: plug in points, is equation equal?)

Answer yes or no.

1. (5, -13)

$-13 = -3(5) + 2$

$-13 = -15 + 2$

$-13 = -13$

yes

Bell Ringer Answers

$y = -3x + 2$

(Hint: plug in points, is equation equal?)

Answer yes or no.

2. (-2, 8)

$8 = -3(-2) + 2$

$8 = 6 + 2$

$8 = 8$

yes

Bell Ringer Answers

$y = -3x + 2$

(Hint: plug in points, is equation equal?)

Answer yes or no.

2. (-3, 7)

$y = -3(x) + 2$

$7 = -3(-3) + 2$

$7 = 9 + 2$

$7 = 11$

no

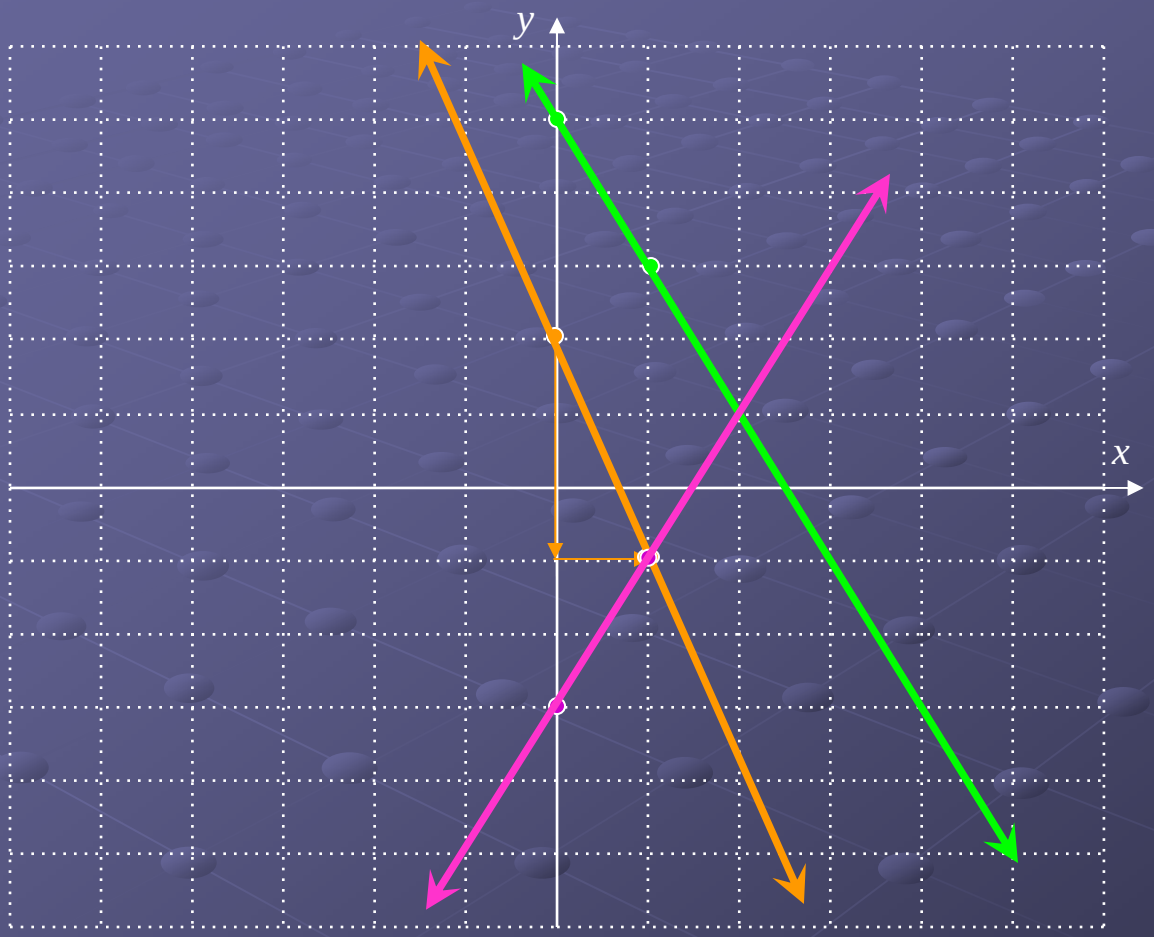
Solutions to Linear Equations

Objective: SWBAT determine if points are solutions to linear equations graphically and algebraically

Agenda:
~Bell Ringer
~Graphically and Algebraic Solutions Review
~Guided Practice
~Individual Practice

Homework: Complete skills practice worksheet

Graphical Solutions

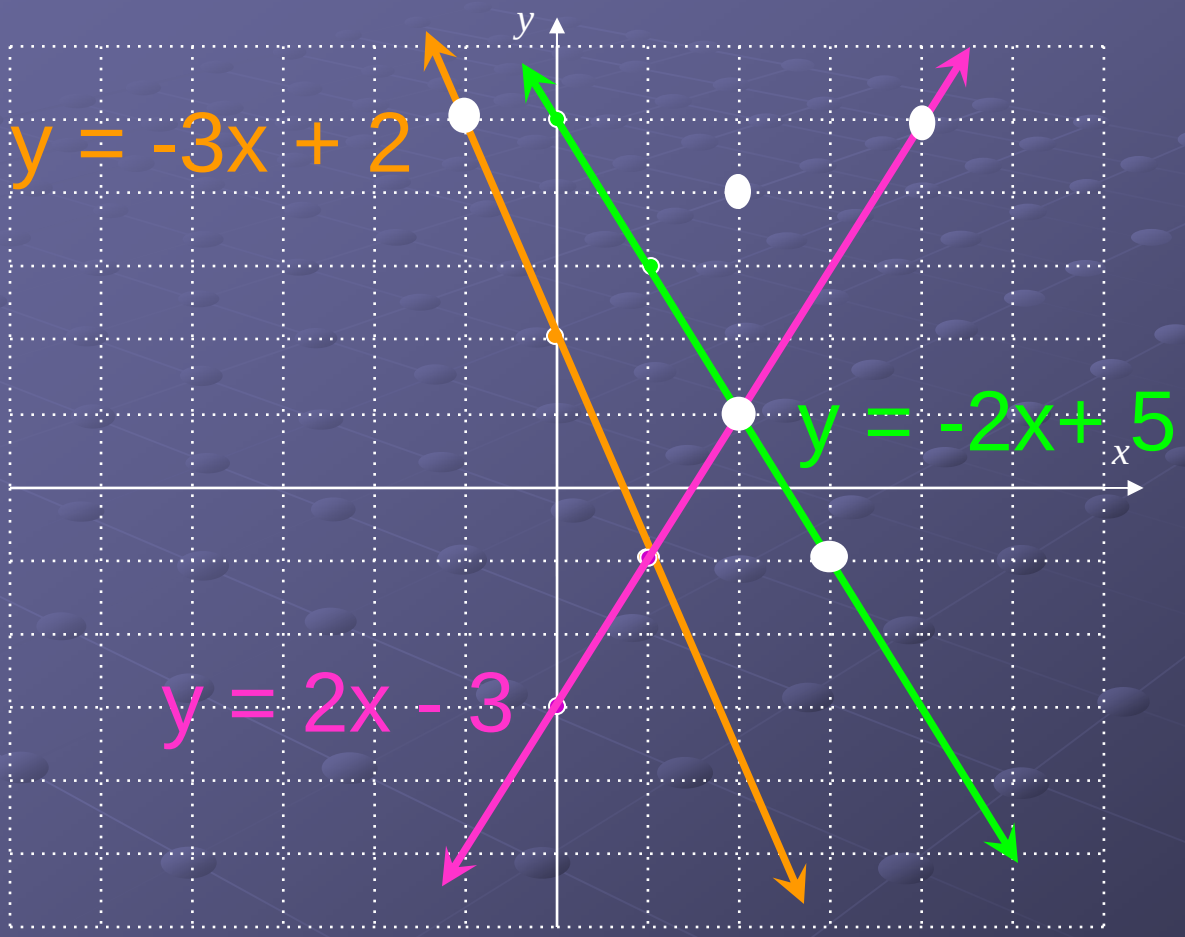


y = -3x + 2

y = -2x + 5

y = 2x - 3

Graphical Solutions



(4, 5)

(2, 4)

(3, -1)

(-1, 5)

(2, 1) (2, 1)

Algebraic Solutions

$y = 2x - 3$

$4 = 2(2) - 3$

$4 = 4 - 3$

$4 \neq 1$

$y = -2x + 5$

$4 = -2(2) + 5$

$4 = -4 + 5$

$4 \neq 1$

$y = -3x + 2$

$4 = -3(2) + 2$

$4 = -6 + 2$

$4 \neq -4$

(2, 4)

(4, 5)

(3, -1)

(-1, 5)

(2, 1)

(2, 1)

Algebraic Solutions

$y = 2x - 3$

(4, 5)

$5 = 2(4) - 3$

$5 = 8 - 3$

$5 = 5$

$y = -2x + 5$

(3, -1)

$-1 = -2(3) + 5$

$-1 = -6 + 5$

$-1 = -1$

$y = -3x + 2$

(-1, 5)

$5 = -3(-1) + 2$

$5 = 3 + 2$

$5 = 5$

(4, 5)

(3, -1)

(-1, 5)

(2, 1) (2, 1)

Algebraic Solutions

$y = 2x - 3$

$1 = 2(2) - 3$

$1 = 4 - 3$

$1 = 1$

$y = -2x + 5$

$1 = -2(2) + 5$

$1 = -4 + 5$

$1 = 1$

$y = -3x + 2$

(2, 1) (2, 1)

$1 = -3(2) + 2$

$1 = -6 + 2$

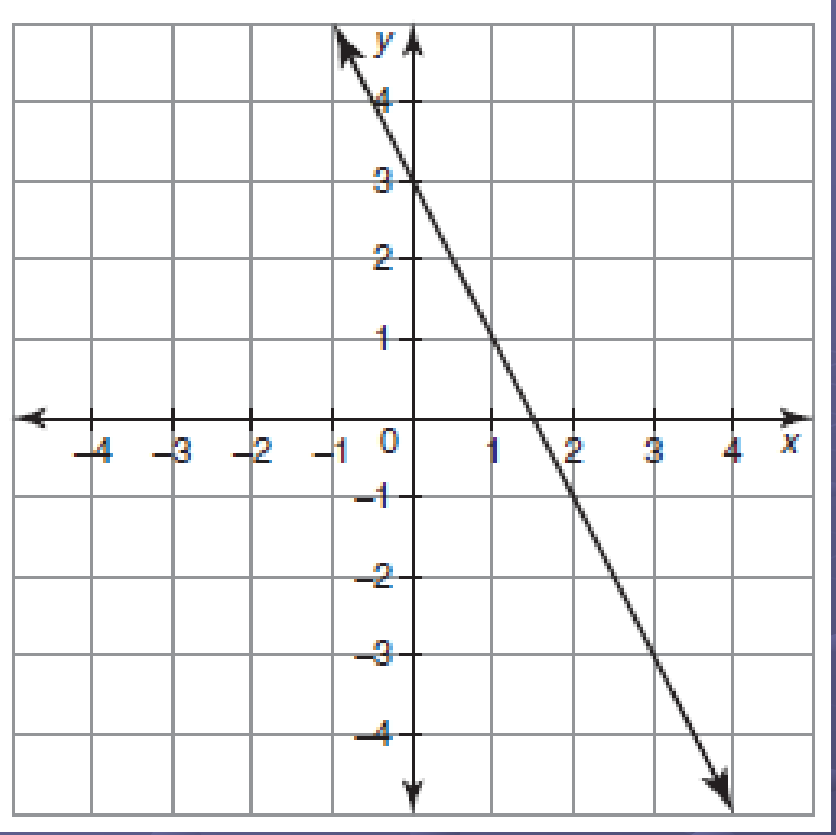
$1 \neq -4$

How do you determine if an ordered pair is a solution to an equation graphically?

- ✗ Plug the point into the equation, check for equality
- ✓ Check the graph to determine if the point is on the line
- ✗ You can only determine a solution algebraically

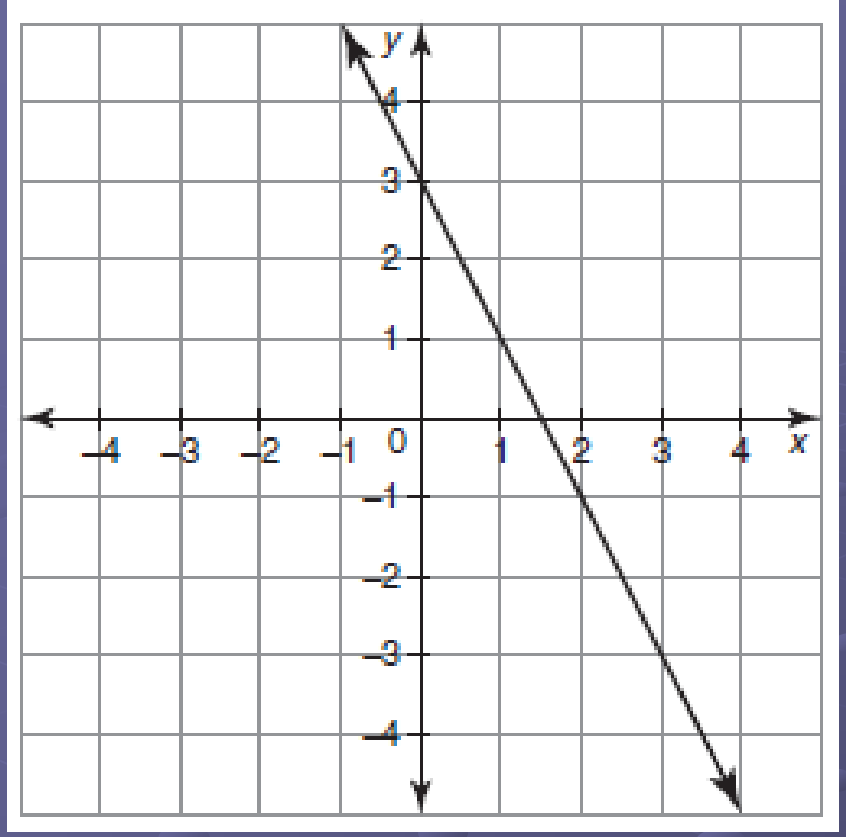
How do you determine if an ordered pair is a solution to an equation algebraically?

- ✓ Plug the point into the equation, check for equality
- ✗ Check the graph to determine if the point is on the line
- ✗ You can only determine a solution by looking at a graph



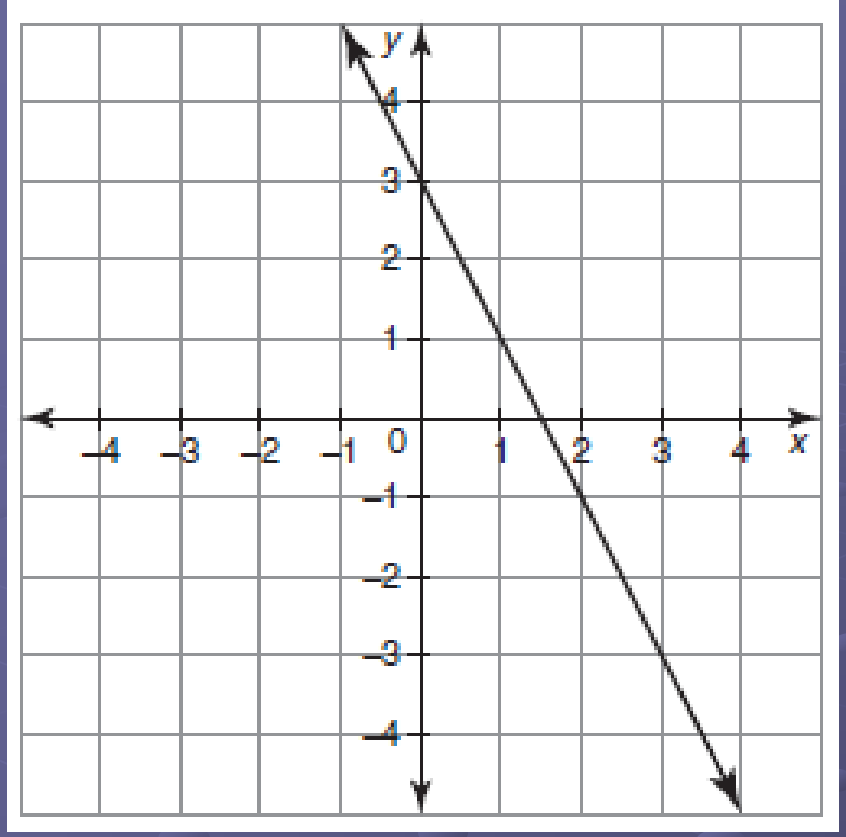
Is the point (3, -1) a solution to the equation of this line?

- ✗ yes
- ✓ no
- ✗ Can not be determined



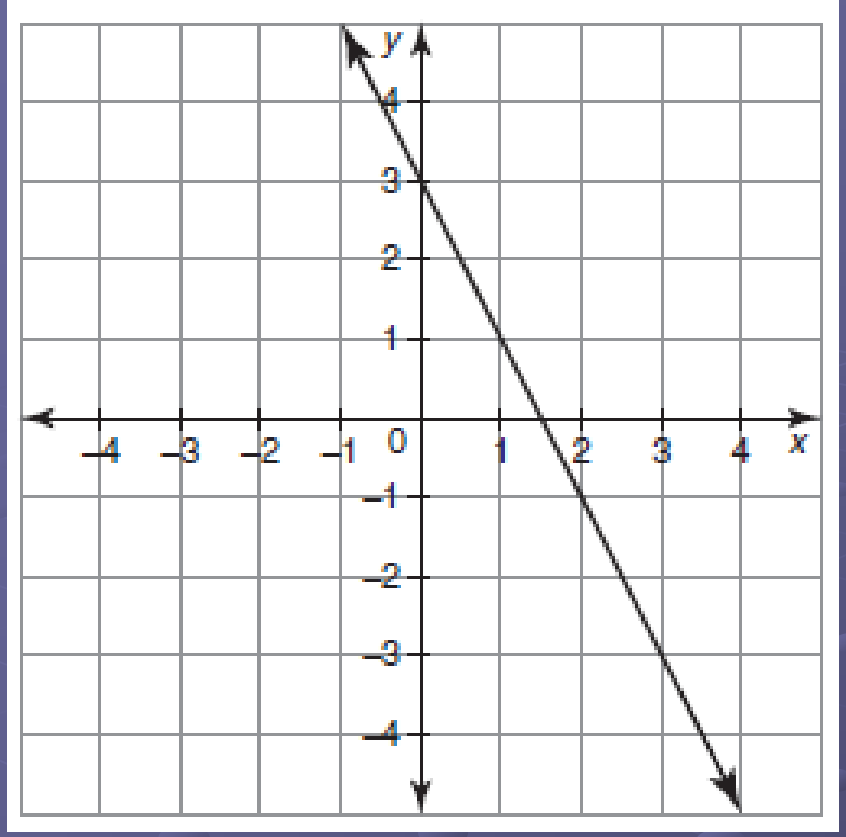
Is the point (0,3) a solution to the equation of this line?

- ✓ yes
- ✗ no
- ✗ Can not be determined



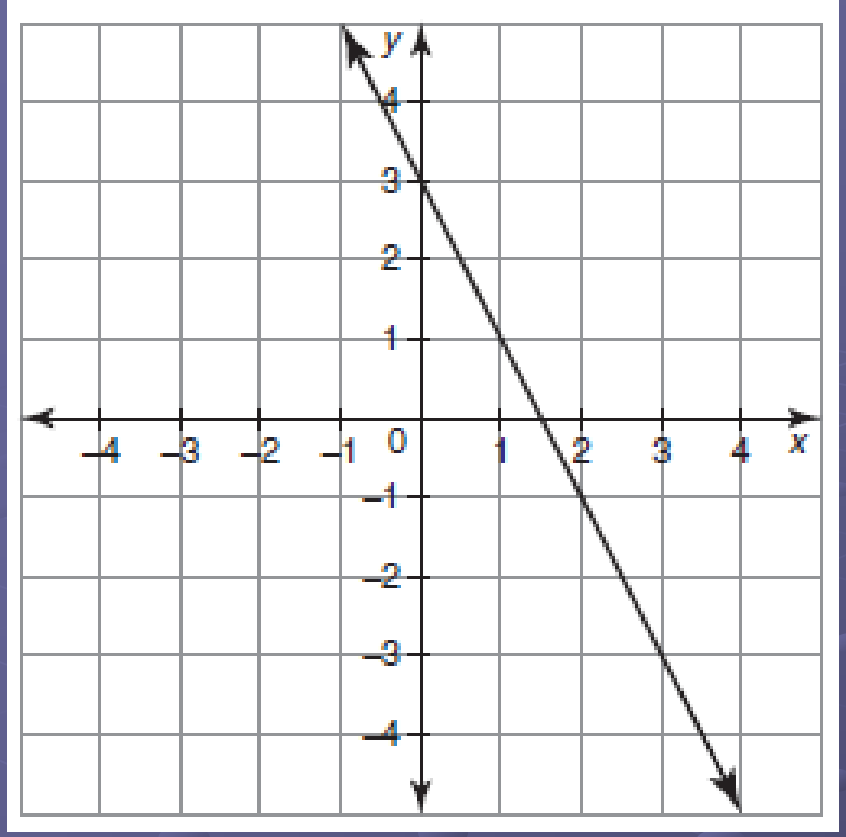
Is the point (3,1) a solution to the equation of this line?

- ✗ yes
- ✓ no
- ✗ Can not be determined



Is the point (7,-11) a solution to the equation of this line?

- ✗ yes
- ✗ no
- ✓ Can not be determined



Is the point (7,12) a solution to the equation of this line?

- ✗ yes
- ✓ no
- ✗ Can not be determined

Is the point (7,-11) a solution to the equation y = -2x + 3?

- ✓ yes
- ✗ no
- ✗ Can not be determined

Is the point (0,3) a solution to the equation $y = -2x + 3$?

- ✓ yes
- ✗ no
- ✗ Can not be determined

Is the point (7,12) a solution to the equation y = -2x + 3?

- ✗ yes
- ✓ no
- ✗ Can not be determined