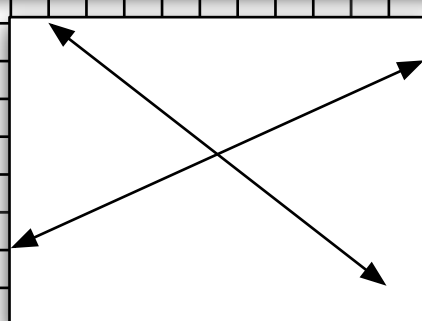
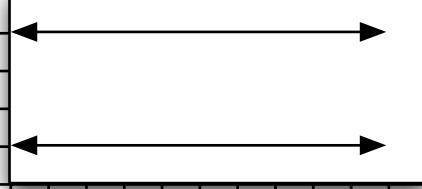


A linear system like this...



has _____ solutions.

A linear system like this...



has _____ solutions.

What would a linear system with **infinitely many** solutions be like?

Blank space for drawing a linear system with infinitely many solutions.

1.2

Graph the following linear system below:

$$3x + 2y = 10$$

$$3x + 2y = 2$$

How many solutions does this system have and why?

Blank space for answering the question.

Now solve the above system using the **elimination** method:

Blank space for solving the system using the elimination method.

1.3

In the last problem, you ended up with a **false statement**. It doesn't matter what you substitute for x or y , you will always get a false statement. Therefore, there are no solutions.

Graph the following linear system below:

$$x - 2y = -4$$

$$y = 1/2(x) + 2$$

How many solutions does this system have?

Blank space for answering the question.

Solve the above linear system using the **substitution** method:

Blank space for solving the system using the substitution method.

1.4

In the last problem, you ended up with a **true statement**. It doesn't matter what you substitute for x or y , you will always get a true statement. Therefore, there are _____ solutions.

Before you found that this system

$$3x + 2y = 10$$

$$3x + 2y = 2$$

had no solutions, as they were **parallel** lines.

How could you have known they were parallel without graphing or trying to solve them?

Hint: It has something to do with the slope-intercept form

Before you found that this system

$$x - 2y = -4$$

$$y = 1/2(x) + 2$$

had infinite solutions, as they were the **same line**.

How could you have known they were the same line without graphing or trying to solve them?

Blank space for answering the question.