

Lesson 2.2: Graphically Solving Linear Systems

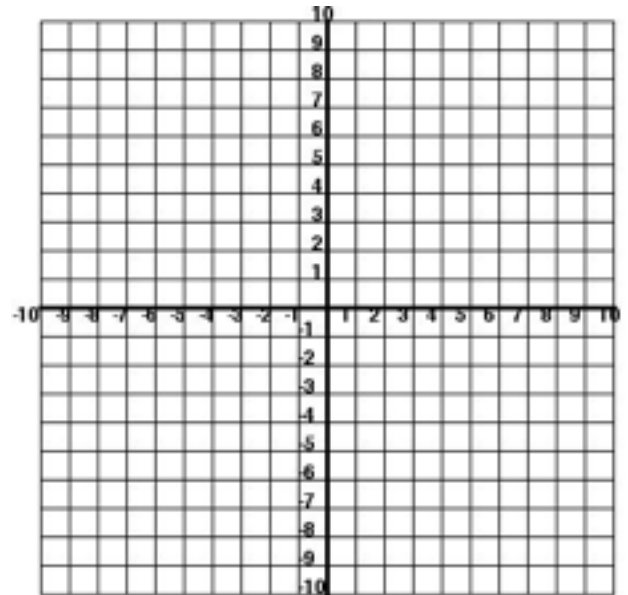
Each of the following pairs of equations forms a **linear system**.

Think about their graphs to determine the number of solutions:

Example: 1

$$Y = 2x + 4$$

$$Y = 2x$$



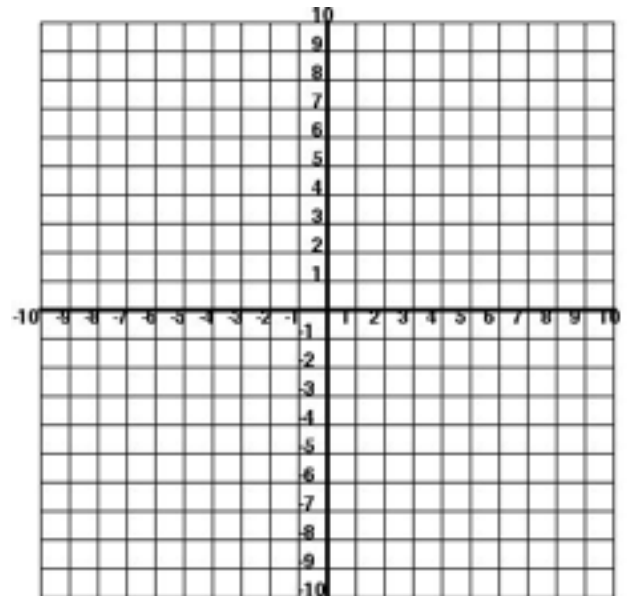
The POI is _____

This system has _____ solutions.

Example: 2

$$Y = 2x + 4$$

$$Y = x + 4$$



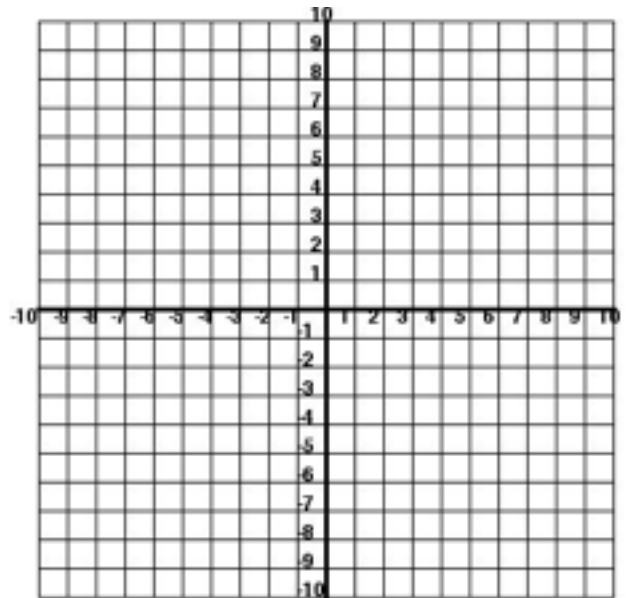
The POI is _____

This system has _____ solutions.

Example: 3

$$Y = x - 3$$

$$4x - 4y = 12$$



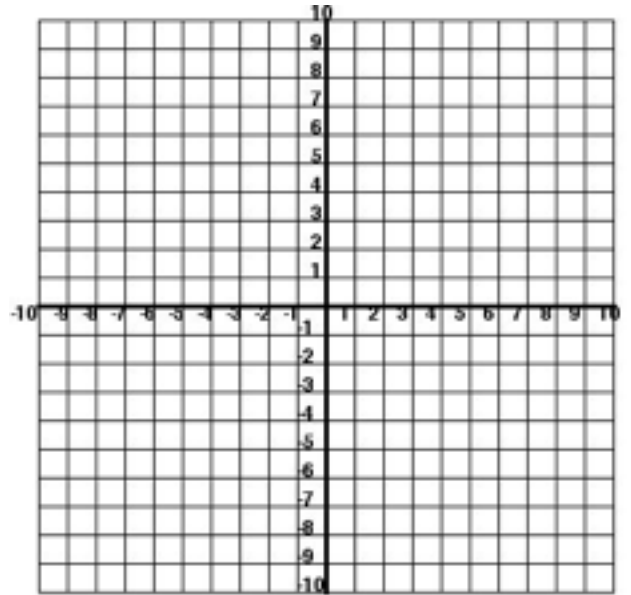
The POI is _____

This system has _____ solutions.

Example: 4

$$Y = 2x + 4$$

$$Y = 2 - x$$



The POI is _____

This system has _____ solutions.

Example 5:

Given $y = 2x + 5$, Write a second equation such that the system has

i) no solutions _____

ii) exactly one solution _____

iii) infinite number of solutions _____





