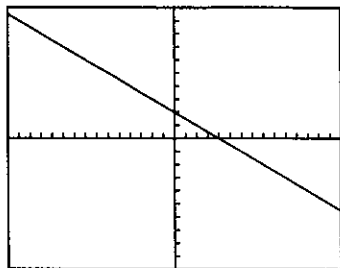


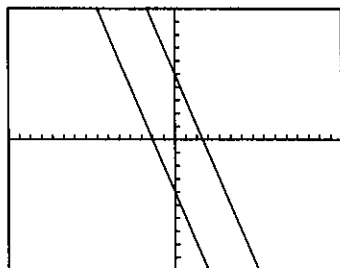
Practice

1. The graphs of the two equations in 3 different linear systems are shown.

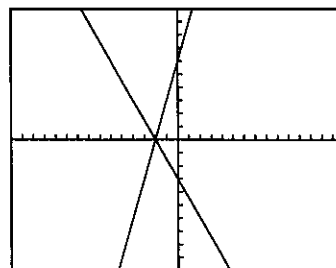
System A



System B



System C



In which linear system do the lines intersect at exactly one point? _____

How many solutions does the system have? _____

In which linear system are the lines parallel? _____

How many solutions does the system have? _____

In which linear system do the lines coincide? _____

How many solutions does the system have? _____

2. The slope-intercept form of each equation in a linear system is given.

How many solutions does each system have?

a) $y = -2x + 4$ ①

Slope: _____; y-intercept: _____

$y = -2x - 1$ ②

Slope: _____; y-intercept: _____

The slopes are _____.

So, there is _____.

b) $y = -3x + 4$ ①

Slope: _____; y-intercept: _____

$y = -2x + 4$ ②

Slope: _____; y-intercept: _____

The slopes are _____.

So, there is _____.

3. Without solving, find the number of solutions of each linear system.

a) $2x + 2y = 6$ ①

$x + y = -2$ ②

For equation ①:

$2x + 2y = 6$

$y = \underline{\hspace{2cm}}$

The slope is $\underline{\hspace{1cm}}$; the y -intercept is $\underline{\hspace{1cm}}$.

For equation ②:

$x + y = -2$

$y = \underline{\hspace{2cm}}$

The slope is $\underline{\hspace{1cm}}$; the y -intercept is $\underline{\hspace{1cm}}$.

So, the system has $\underline{\hspace{3cm}}$.

b) $3x - y = 5$ ①

$-6x + 2y = -10$ ②

For equation ①:

$3x - y = 5$

$y = \underline{\hspace{2cm}}$

The slope is $\underline{\hspace{1cm}}$; the y -intercept is $\underline{\hspace{1cm}}$.

For equation ②:

$-6x + 2y = -10$

$y = \underline{\hspace{2cm}}$

The slope is $\underline{\hspace{1cm}}$; the y -intercept is $\underline{\hspace{1cm}}$.

So, the system has $\underline{\hspace{3cm}}$.

c) $x + y = 4$ ①

$-4x + 2y = 8$ ②

For equation ①:

$x + y = 4$

$y = \underline{\hspace{2cm}}$

The slope is $\underline{\hspace{1cm}}$;
the y -intercept is $\underline{\hspace{1cm}}$.

For equation ②:

$-4x + 2y = 8$

$y = \underline{\hspace{2cm}}$

The slope is $\underline{\hspace{1cm}}$;
the y -intercept is $\underline{\hspace{1cm}}$.

The slopes are $\underline{\hspace{3cm}}$.

So, the system has $\underline{\hspace{3cm}}$.