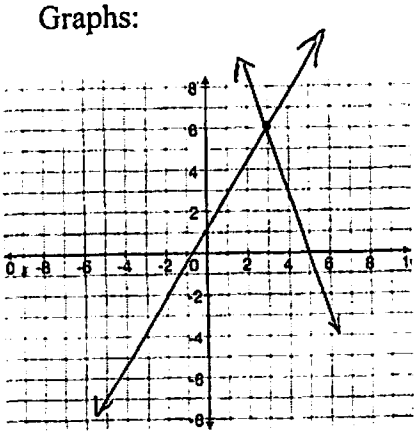
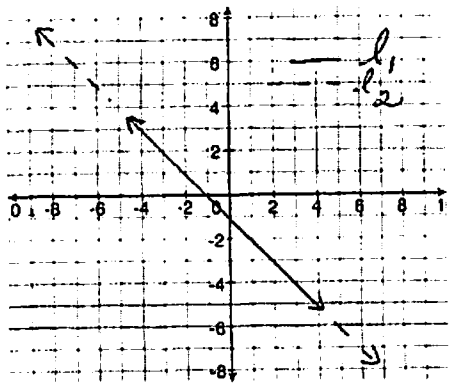
SYSTEMS OF LINEAR EQUATIONS

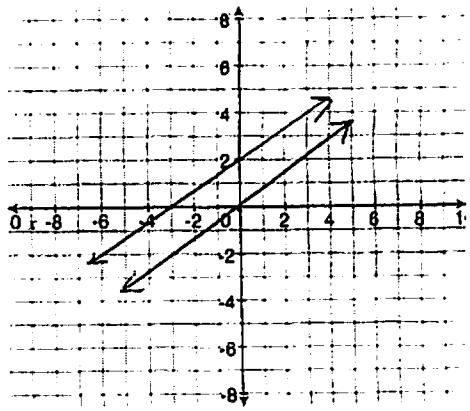
$$Y_1 = M_1 X_1 + B_1$$
$$Y_2 = M_2 X_2 + B_2$$

Consistent Systems have answers, inconsistent systems don't have answers.

Graphs:







	Consistent & independent (intersecting lines)	consistent & dependent (same line)	inconsistent (parallel lines)
Slopes:	$M_1 \neq M_2$	$M_1 = M_2$	$M_1 = M_2$
Y-intercept's:	B's can be = or ≠	$B_1 = B_2$	$B_1 \neq B_2$
# of answers:	One ordered pair	∞ # ordered pairs	no answers, Ø
Example of Solution:			
	X = 3 Go ahead and finish For y. (x,y)	0 = 0 Just state {(x,y): y=mx +b} Use common equation	0=1 no solution or Ø