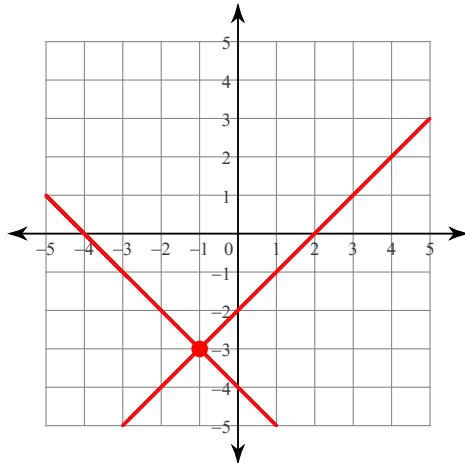Algebra 1

Practice 8.4 Special Systems
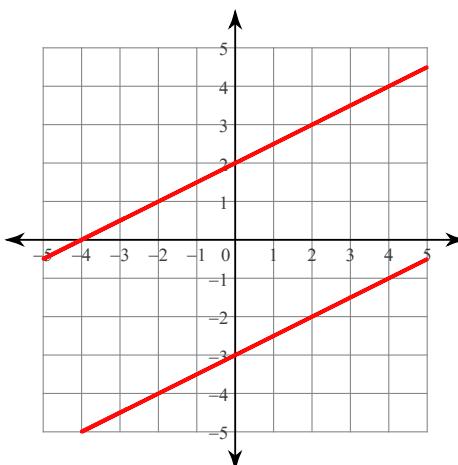
Solve each system by graphing.

1) $y = -x - 4$
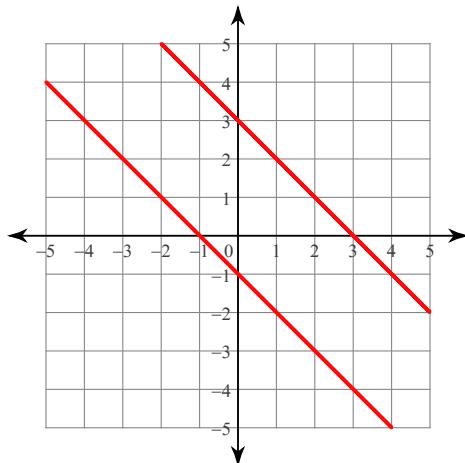 $y = x - 2$

$(-1, -3)$

2) $y = \frac{1}{2}x + 2$
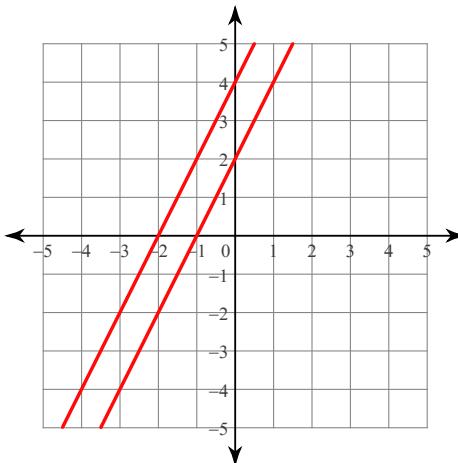
   $y = \frac{1}{2}x - 3$

No solution

3) $x + y = 3$
   $x + y = -1$

No solution

4) $2x - y = -4$
   $2x - y = -2$

No solution

Solve each system by elimination.

5) $-3x + 7y = -2$
$6x - 14y = 4$

Infinite number of solutions

6) $16x - 4y = -4$
$-8x + y = -3$

$(1, 5)$

7) $9x + 15y = -12$
$-3x - 5y = 7$

No solution

8) $-5x - 4y = -1$
$10x + 8y = 2$

Infinite number of solutions

Solve each system by substitution.

9) $12x - 2y = 3$
$y = 6x - 2$

No solution

10) $y = 3x + 21$
$-9x + 3y = 63$

Infinite number of solutions

11) $3x - 6y = -6$
$y = x - 2$

$(6, 4)$

12) $y = -8x - 1$
$24x + 3y = -3$

Infinite number of solutions