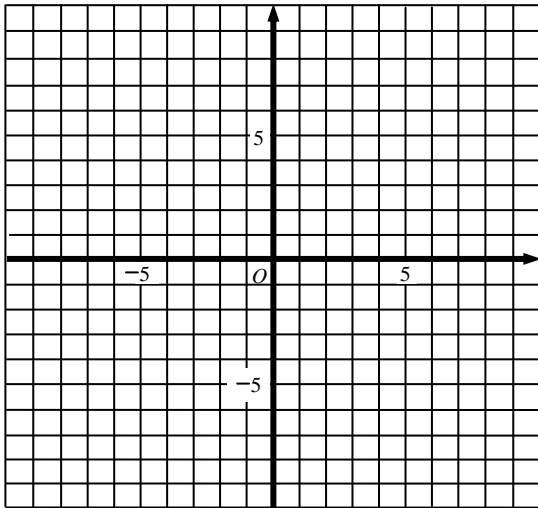


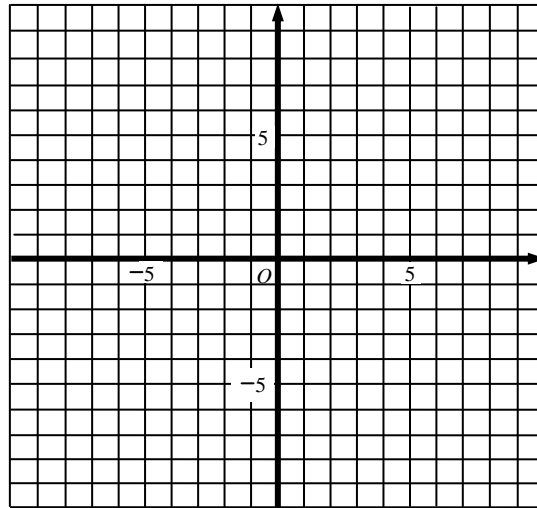
A solution to a linear system is the intersection point of the two lines. Usually it is written as a coordinate  $(x, y)$ .

Graph each of the following systems of equations and write the solution as a coordinate.

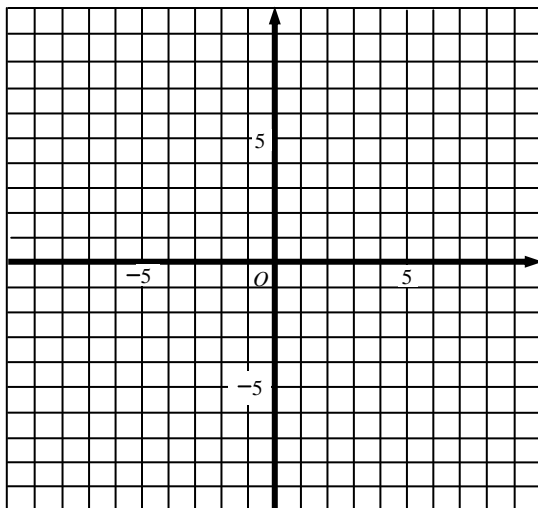
1)  $y = x$  \_\_\_\_\_  
 $y = 3x - 4$



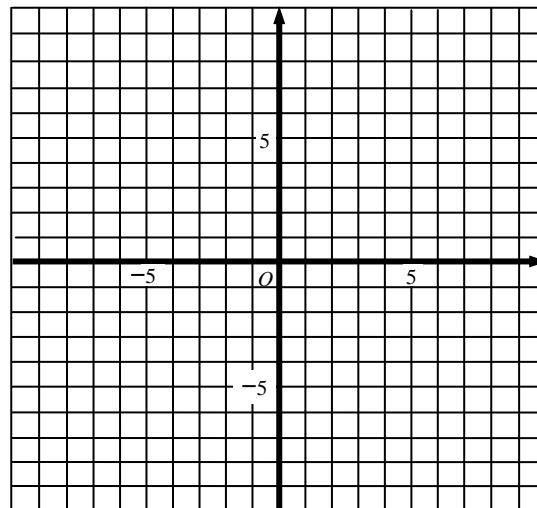
2)  $y = \frac{3}{5}x + 1$  \_\_\_\_\_  
 $y = -5$



3)  $y = -2x - 1$  \_\_\_\_\_  
 $3x - 2y = -12$



4)  $y = \frac{5}{4}x - 1$  \_\_\_\_\_  
 $x + y = 8$



All systems can be solved using the graphing method however some systems are set up to make graphing easier. Equations in the form  $y = mx + b$  are easiest solved through graphing.

In each problem below, set up the system of equations and solve the system using the graphing method.

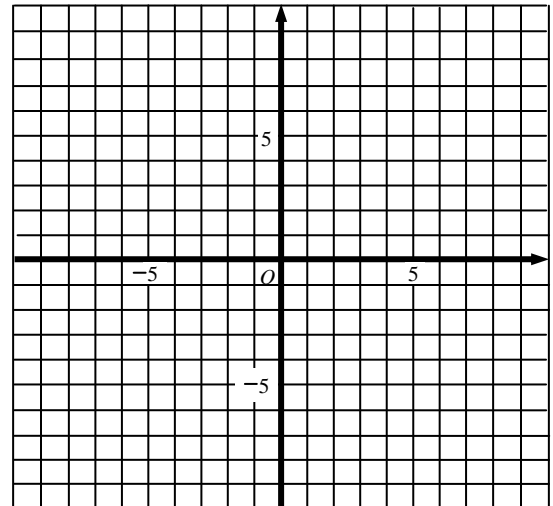
5. The sum of two numbers is 11. Their difference is 5. Find both numbers.

Variable: \_\_\_\_\_

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_



6. The difference of two numbers is 4. Twice one number equals negative 3 times the other. Find both numbers.

Variable: \_\_\_\_\_

Variable: \_\_\_\_\_

Equation: \_\_\_\_\_

Equation: \_\_\_\_\_

