

1 worksheet

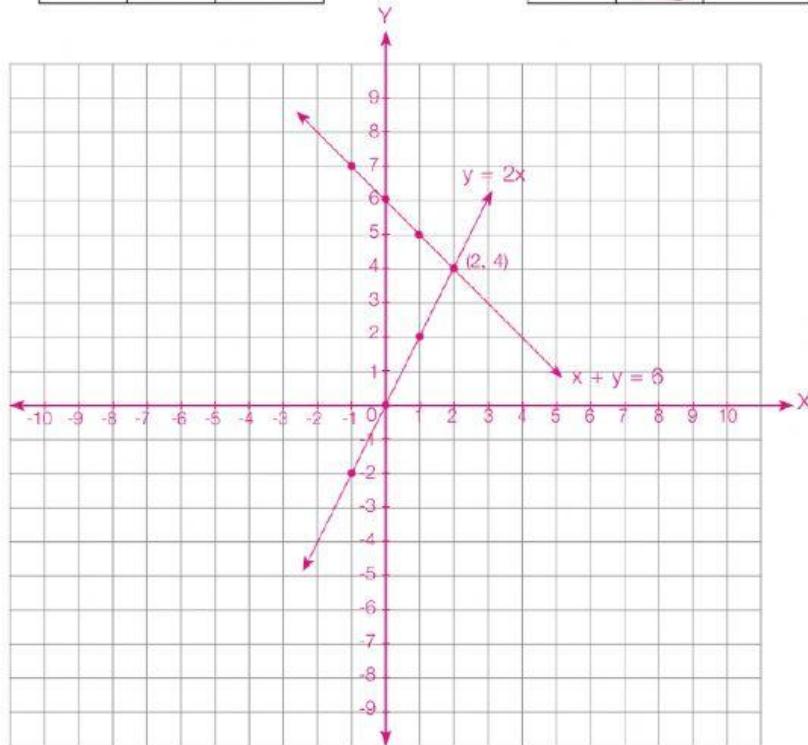
1. The sum of two numbers is 6, and one number is twice another number.
What are these two numbers?

When one number is x , and another is y , the system of equations consists of

equations $y = 2x$ and $x + y = 6$.

$y = 2x$		
x	y	(x,y)
2		(2,4)
1	2	
0		(0,0)
-1		(-1,-2)

$x + y = 6$		
x	y	(x,y)
2	4	
1	5	
0		(0,6)
-1		(-1,7)



We can see that the point of intersection of equations $y = 2x$ and $x + y = 6$ is point (2,4).

Thus, $x =$ and $y =$

Check the answers $4 = 2(2)$

and $2 + 4 = 6$

Therefore, one number is 2, and another is 4.

1 worksheet

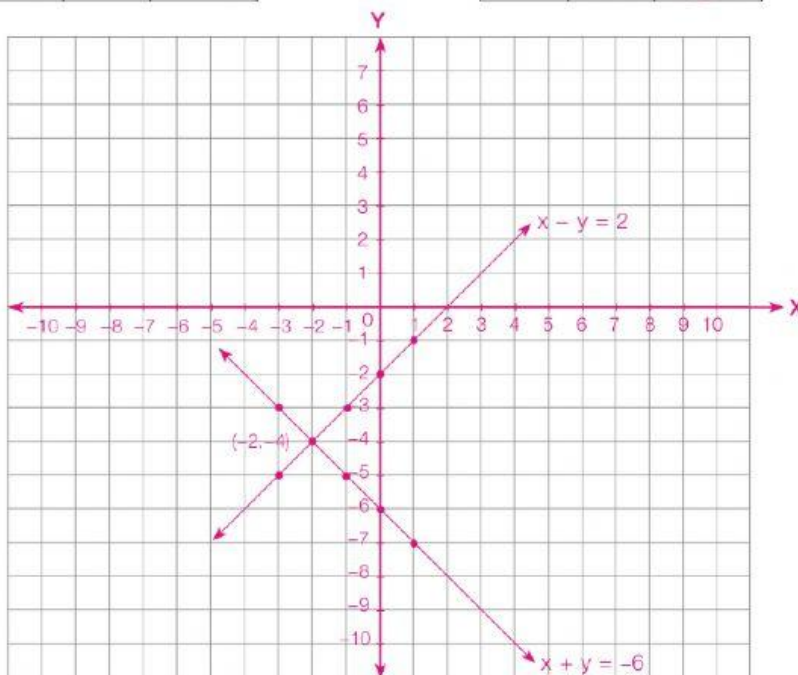
2. The sum of two numbers is -6 , and their difference is 2 . Find these two numbers.

When one number is x , and another is y , the system of equations consists of equations

$$x + y = -6 \text{ and } x - y = 2.$$

$x + y = -6$		
x	y	(x,y)
	-7	(1,-7)
0		(0,-6)
-1		
-2	-4	(-2,-4)
-3	-3	(-3,-3)

$x - y = 2$		
x	y	(x,y)
1	-1	
0	-2	(0,-2)
-1		(-1,-3)
-2	-4	(-2,-4)
-3		



We can see that the point of intersection of equations $x + y = -6$ and $x - y = 2$ is point $(-2, -4)$.

Thus, $x =$ and $y =$

Check the answers $(-2) + (-4) = -6$

and $(-2) - (-4) = 2$

Therefore, one number is -2 , and another is -4 .