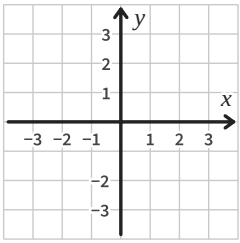
Simultaneous equations: special cases *lesson handout*

Turn and talk

Two straight lines are drawn on a grid. How many points can they have in common?

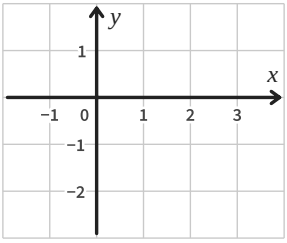


We do

Draw both lines. How many solutions?

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

x	y (1)	y (2)
0	−2	
1	−1	
2	0	

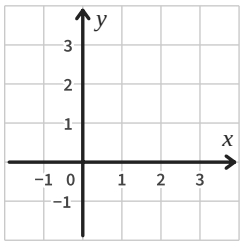


You do

Draw both lines. How many solutions?

(1) $y = x + 1$ (2) $y = 3 - x$

x	y (1)	y (2)
0		
1		
2		

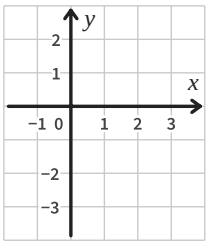


You do

Draw both lines. How many solutions?

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

x	y (1)	y (2)
0		
1		
2		



We do

How many solutions?

(1) $y = 5 - 2x$ (2) $y = -2x + 5$

	(1)	(2)
Gradient	−2	−2
y intercept		

You do

How many solutions?

(1) $y = 4x + 1$ (2) $y = 2x + 1$

	(1)	(2)
Gradient		
y intercept		

You do

How many solutions?

(1) $y = 6 - x$ (2) $y = -x + 2$

	(1)	(2)
Gradient		
y intercept		

We do

How many solutions?

(1) $x + y = 5$ (2) $y = 2 - x$

(1) $y = 5 - x$

	(1)	(2)
Gradient		
y intercept		

You do

How many solutions?

(1) $3y = 6x + 3$ (2) $y = x + 1$

(1) _____

	(1)	(2)
Gradient		
y intercept		

You do

How many solutions?

(1) $4x + 2y = 6$ (2) $y = 1 - 2x$

(1) _____

	(1)	(2)
Gradient		
y intercept		