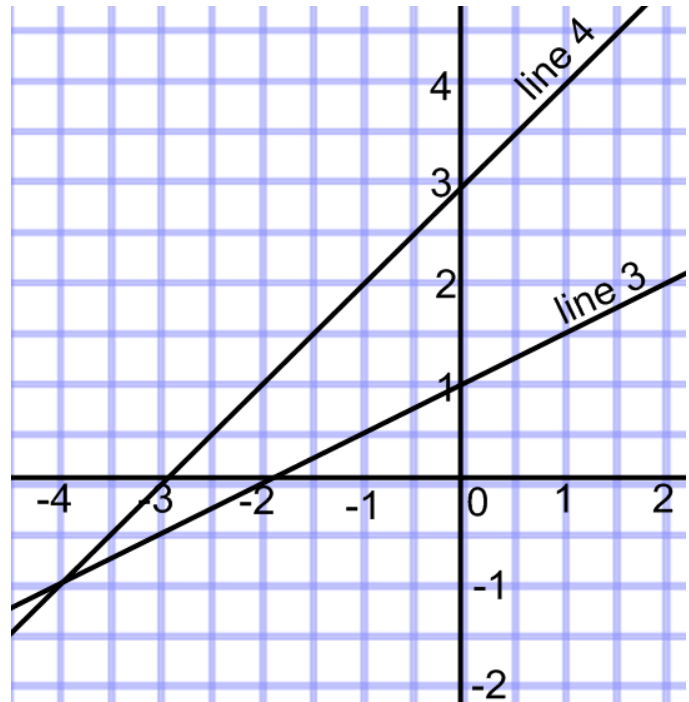
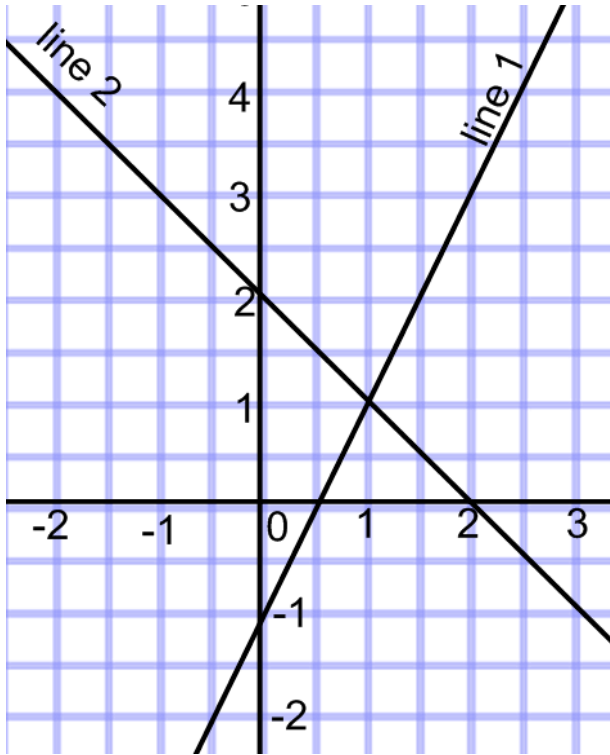


# Mini Murder Mystery

One of the following 6 people has murdered one of the others.  
 Each has made 4 statements about these 2 graphs.  
 The murderer has made 3 errors, the victim made 0 errors.  
 The other suspects made 1 or 2 errors



Claire says

- Line 1 is steeper than line 3
- Slope of line 3 is 0.5
- (1,0) is on line 3
- lines 1 and 2 intersect at (1,1)



Lucy says

- The slope of line 4 is 1
- The slope of line 2 is -1
- The y intercept of Line 3 is 1
- (4,3) would be on line 3



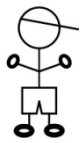
Josh says

- Slope of line 1 is 2
- (-2,1) is on line 4
- (0,-3) is on line 4
- (-1,-4) is on lines 3 & 4



Jack says

- The slope of line 2 is -1
- (0,2) and (2,0) are both on line 2
- (2,5) is on line 4
- The slope of line 3 is 2



Duncan says

- Lines 1 & 2 are perpendicular
- The slope of line 4 is 3
- (0, -1) is on line 1
- Line 3 is steeper than line 4



Ashley says

- Line 4 would be parallel to  $y = x$
- (0.5,0) is on line 1
- (4,-2) is on line 2
- lines 3 and 4 intersect at (-1,-4)



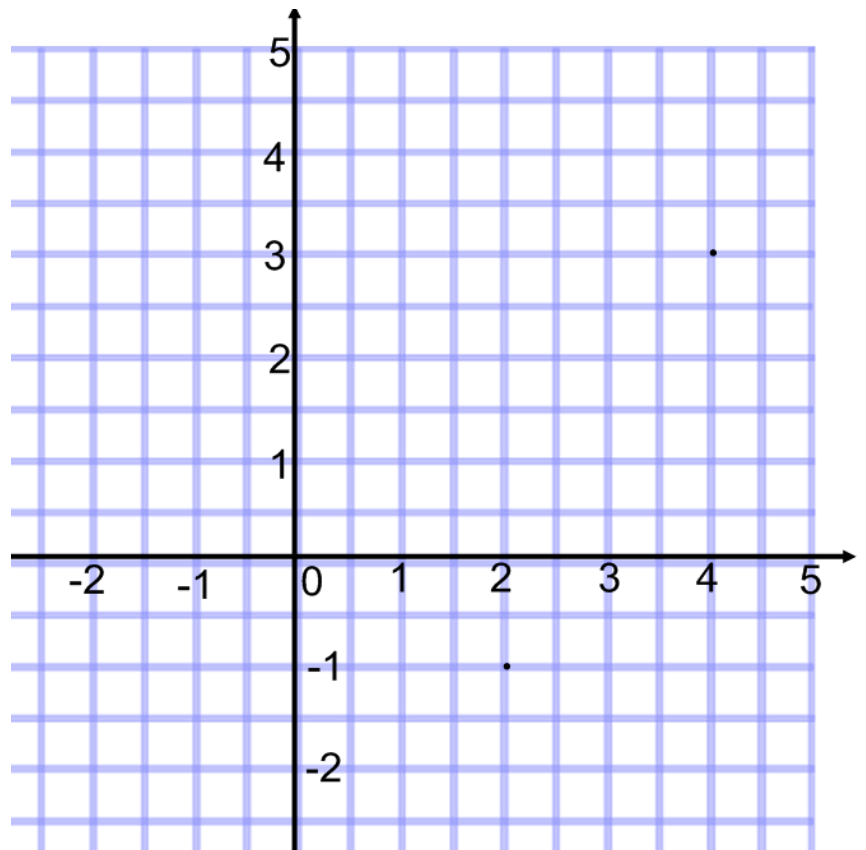
Accusation, , \_\_\_\_\_ murdered \_\_\_\_\_

## Where?

The murder took place at the coordinates described by the following:

- It is on the line  $y = 2x - 5$
- The y coordinate is less than the x coordinate
- The sum of the coordinates is 8.5

Mark the murder place with a large "x"



Why?

Find the reason why the murder happened! Find the slopes and match the letter to your answers at the bottom of the page.

<b>a</b> Slope of $y = 2x - 1$	<b>b</b> Slope of $-4x - y = 9$	<b>c</b> Slope of $y = 5x + 6$	<b>d</b> Slope of $y = 3x + 1$	<b>e</b> Slope of $y = \frac{1}{4}x + 5$
<b>f</b> Slope of $y = 0.6x$	<b>g</b> Slope of $y = x - 1$	<b>h</b> Slope of $y = -3x + 2$	<b>i</b> Slope of $y = 6x - 7$	<b>j</b> Slope of $10 = 20x - y$
<b>k</b> Slope of $y = -1.2x$	<b>l</b> Slope of $y = -2\frac{1}{2}x + 5$	<b>m</b> Slope of $y = -2x + 3$	<b>n</b> Slope of $y = 0.5x + 6$	<b>o</b> Slope of $y = -12x + 3$
<b>p</b> Slope of $y = -x + 8$	<b>q</b> Slope of $6 = 8x - y$	<b>r</b> Slope of $y = 1.5x - 1$	<b>s</b> Slope of $y = 10x$	<b>t</b> Slope of $y = 2.5x + 3$
<b>u</b> Slope of $y = 3$	<b>v</b> Slope of $y = -0.5x + 1$	<b>w</b> Slope of $y = -7x$	<b>x</b> Slope of $y - 37 = 9(x - 3)$	<b>y or z</b> Slope of $y = 4x + 5$

-4	$\frac{1}{4}$	5	2	0	10	$\frac{1}{4}$	10	-3	$\frac{1}{4}$
6	10	10	4	-2	-2	$\frac{1}{4}$	2.5	$1\frac{1}{2}$	6
5	2	-2.5							