

Question	Answer																																																
1	<p>a) P $y = x + 1$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> </table> <p>R $y = -3x + 1$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>7</td><td>4</td><td>1</td><td>-2</td><td>-5</td></tr> </table> <p>Q $y = -2x + 1$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>5</td><td>3</td><td>1</td><td>-1</td><td>-3</td></tr> </table> <p>S $y = \frac{1}{2}x + 1$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>0</td><td>0.5</td><td>1</td><td>1.5</td><td>2</td></tr> </table> <p>b) All lines plotted correctly and with corresponding labels. c) All the lines pass through (0, 1) or have the same y-intercept.</p>	x	-2	-1	0	1	2	y	-1	0	1	2	3	x	-2	-1	0	1	2	y	7	4	1	-2	-5	x	-2	-1	0	1	2	y	5	3	1	-1	-3	x	-2	-1	0	1	2	y	0	0.5	1	1.5	2
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2	<p>a) J $y = x + 5$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> </table> <p>L $y = -3x - 1$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>5</td><td>2</td><td>-1</td><td>-4</td><td>-7</td></tr> </table> <p>K $y = 2x - 3$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>-7</td><td>-5</td><td>-3</td><td>-1</td><td>1</td></tr> </table> <p>M $y = 2 - x$</p> <table border="1"> <tr> <td>x</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td></tr> <tr> <td>y</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td></tr> </table> <p>b) All lines plotted correctly and with corresponding labels. c) J(0, 5) K(0, -3) L(0, -1) M(0, 2) The y-coordinate is where the line crosses the y-axis d) (0, 22)</p>	x	-2	-1	0	1	2	y	3	4	5	6	7	x	-2	-1	0	1	2	y	5	2	-1	-4	-7	x	-2	-1	0	1	2	y	-7	-5	-3	-1	1	x	-2	-1	0	1	2	y	4	3	2	1	0
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3	<p>a) (0, 5)</p> <p>b) e.g. $y = 7x + 5$ accept any line where $m > 4$ and $c = 5$</p> <p>c) Correct line sketched where the line crosses the y-axis at 5 and has a negative gradient.</p>																																																
4	<table border="1"> <tr> <td>$y = 8x + 9$ ✓</td> <td>$y = 8x + 5$</td> <td>$y = 8x - 7$</td> </tr> <tr> <td>(0, 9)</td> <td>(0, 5)</td> <td>(0, -7)</td> </tr> </table> <table border="1"> <tr> <td>$y = 9 - 8x$ ✓</td> <td>$17x + 9 = y$ ✓</td> <td>$y = 2x + 5 + 4$ ✓</td> </tr> <tr> <td>(0, 9)</td> <td>(0, 9)</td> <td>(0, 9)</td> </tr> </table> <table border="1"> <tr> <td>$y = \frac{1}{8}x - 9$ ✓</td> <td>$y = 9x + 8$</td> <td>$17 - 8 - x = y$ ✓</td> </tr> <tr> <td>(0, 9)</td> <td>(0, 8)</td> <td>(0, 9)</td> </tr> </table>	$y = 8x + 9$ ✓	$y = 8x + 5$	$y = 8x - 7$	(0, 9)	(0, 5)	(0, -7)	$y = 9 - 8x$ ✓	$17x + 9 = y$ ✓	$y = 2x + 5 + 4$ ✓	(0, 9)	(0, 9)	(0, 9)	$y = \frac{1}{8}x - 9$ ✓	$y = 9x + 8$	$17 - 8 - x = y$ ✓	(0, 9)	(0, 8)	(0, 9)																														
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Y9 – Autumn – Block 1 – Step 4 – Compare intercepts (continued)

Question	Answer
5	a) $y = \frac{1}{2}x + 5$ (0, 5)
	b) $y = 5x + \frac{1}{2}$ (0, $\frac{1}{2}$)
	c) $17 - 8x = y$ (0, 17)
	d) $y = 12.7 + x$ (0, 12.7)
	e) $y = \frac{5}{3}x + \frac{17}{2}$ (0, $\frac{17}{2}$)
	f) $-18x = y$ (0, 0)
6	a) $L_1: y = 7x - 9$ b) $L_2: y = 7x + 3$
7	a) $y = 3x - 12$ b) $y = -9x + \frac{7}{9}$