

Drawing Graphs Past Paper Questions (MS)



Q1.

Question	Working	Answer	Mark	Notes
(a)		3 (5) 7 (9) 11, 13	2	B2 for 3, 7, 11, 13 (B1 for 2 or 3 correct values)
(b)		Graph drawn	2	M1 (may fit from (a) if B1 awarded) for at least 5 points correctly plotted A1 for correct graph from $x = 0$ to $x = 5$

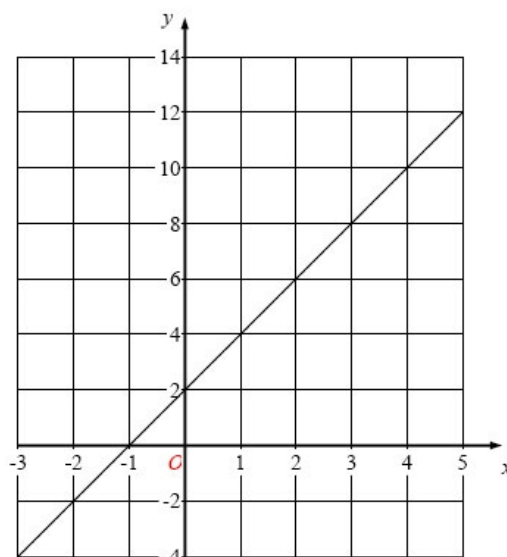
Q2.

PAPER: IMA0/2F				
Question	Working	Answer	Mark	Notes
(a)		10, 8, (6), 4, 2, (0)	2	B2 for fully correct table (B1 for 2 or 3 entries correct)
(b)		line drawn	2	B2 for correct straight line between $x = -1$ and $x = 4$ (B1 for a single straight line which passes through (0, 8) or for a single straight line with negative gradient -2 or for at least 5 points from their table plotted correctly)

Q3.

	Working	Answer	Mark	Notes																
(a)		<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>y</td> <td>-2</td> <td>0</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> </table>	x	-2	-1	0	1	2	3	4	y	-2	0	2	4	6	8	10	2	B2 cao (B1 for any 2 correct values)
x	-2	-1	0	1	2	3	4													
y	-2	0	2	4	6	8	10													
(b)		Correct graph	2	B2 for a correct line through at least two correct points (B1 for correct points plotted ft their table if at least B1 earned in part a)																

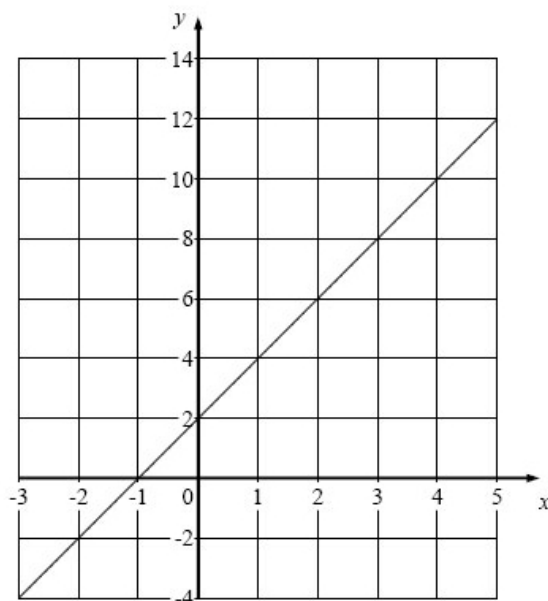
b





Q4.

		Working	Answer	Mark	Notes																
	(a)		<table border="1"> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>y</td> <td>-2</td> <td>0</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> </tr> </table>	x	-2	-1	0	1	2	3	4	y	-2	0	2	4	6	8	10	2	B2 cao (B1 for any 2 correct values)
	x	-2	-1	0	1	2	3	4													
y	-2	0	2	4	6	8	10														
	(b)		Correct graph	2	B2 correct line through at least 2 correct points (B1 for correct points plotted or ft from their table if at least B1 earned in part (a))																



Q5.

Question	Working	Answer	Mark	Notes
(a)		-2, (1), 4, 7, 10, (13)	2	B2 for 4 values correct (B1 for 2 or 3 values correct)
(b)		Single line from (-2, -2) to (3, 13)	2	M1 for plotting at least 5 of their points correctly OR single straight line with positive gradient passing thro' (0,4) from $x = -2$ to $x = 3$ OR single straight line of gradient 3 from $x = -2$ to $x = 3$ OR correct straight line that passes through 3 correct points A1 cao for correct straight line from at least (-2,-2) to (3,13)



Q6.

Question	Working	Answer	Mark	Notes
(a)		$(-2) -1.5 -1 -0.5 (0) 0.5$	B2 [B1]	for a fully correct table for 2 or 3 correct entries]
(b)		Correct line	M1 A1	for correctly plotting at least 5 of their points (provided B1 scored in part (a)) or for a straight line with gradient 0.5 or for a straight line through (0,-1) with a positive gradient for a correct line between $x = -2$ and $x = 3$
(c)		2.6	B1	for answer in the range 2.5 to 2.7 or fit a single straight line with positive gradient

Q7.

PAPER: 1MA0_2H																
Question	Working	Answer	Mark	Notes												
	<table border="1" style="margin-left: 20px;"> <tr> <td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td> </tr> <tr> <td>-7</td><td>-5</td><td>-3</td><td>-1</td><td>1</td><td>3</td> </tr> </table>	-2	-1	0	1	2	3	-7	-5	-3	-1	1	3	Straight line from $(-2, -7)$ to $(3, 3)$	4	<p>(Table of values) C1 for axes scaled and labelled M1 for at least 2 correct attempts to find points by substituting values of x M1 ft for plotting at least 2 of their points (any points plotted from their table must be plotted correctly) A1 for correct line between $x = -2$ and $x = 3$</p> <p>(No table of values) C1 for axes scaled and labelled M1 for at least 2 correct points with no more than 2 incorrect points M1 for at least 2 correct points (and no incorrect points) plotted OR line segment of $y = 2x - 3$ drawn A1 for correct line between $x = -2$ and $x = 3$</p> <p>(Use of $y = mx + c$) C1 for axes scaled and labelled M1 for line drawn with gradient of 2 OR line drawn with a y intercept of -3 M1 for line drawn with gradient of 2 AND with a y intercept of -3 A1 for correct line between $x = -2$ and $x = 3$</p> <p>SC : B2 for the correct line from $x = 0$ to $x = 3$</p>
-2	-1	0	1	2	3											
-7	-5	-3	-1	1	3											



Q8.

PAPER: 1MA0 1H																	
Question	Working		Answer	Mark	Notes												
	<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>-1</td> <td>2</td> <td>5</td> <td>8</td> </tr> </table>		x	-2	-1	0	1	2	y	-4	-1	2	5	8	$y = 3x + 2$ drawn	4	B1 for axes scaled and labelled (Table of values) M1 for at least 2 correct attempts to find points by substituting values of x M1 ft for plotting at least 2 of their points (any points from their table must be correctly plotted) A1 for correct line between $x = -2$ and $x = 2$ (No table of values) M1 for at least 2 correct points with no more than 2 incorrect points M1 for at least 2 correct points (and no incorrect points) plotted OR line segment of $y = 3x + 2$ drawn A1 for correct line between $x = -2$ and $x = 2$ (Use of $y = mx + c$) M1 for line drawn with gradient of 3 OR line drawn with y intercept at 2 M1 for line drawn with gradient of 3 AND with y intercept at 2 A1 for correct line between $x = -2$ and $x = 2$ SC B2 (indep of B1) for correct line segment between $x = 0$ and $x = 2$ (ignore any additional incorrect line segment(s))
x	-2	-1	0	1	2												
y	-4	-1	2	5	8												

Q9.

Question	Working	Answer	Mark	Notes
(a)		5, 4, (3), 2, 1, (0)	2	M1 for 1 or 2 or 3 correct entries A1 cao
(b)		Line drawn	2	M1 plots 5 of their points correctly or a straight line with gradient -1 or a straight line through $(0, 4)$ A1 correct line between $x = -1$ and $x = 4$