EQUATION OF A LINE

Pearson Edexcel - Thursday 7 June 2018 - Paper 2 (Calculator) Foundation Tier

1.

22		$y = 3x - 6$	M1	for a correct method to find the gradient of the line, or $m = 3$ **OR** identifies -6 as the intercept in words or in a partial equation **OR** $y - b = m(x - a)$ where $m \neq 3$ and (a, b) is a correct coordinate	Just ringing -6 is insufficient
			M1	for $y = 3x + c$ **or** (L=) $3x - 6$ **or** $y = $"3"$x - 6$ **OR** $y - y_1 = 3(x - x_1)$ **or** $y - b = $"3"$(x - a)$ where (a, b) is a correct coordinate	Award of this mark implies the first M1 c must be seen either as a letter or a number
			A1	accept $y = 3x + -6$ oe	

Pearson Edexcel – Specimen 1 - Paper 3 (Calculator) Foundation Tier

2.

23		$y = 2x + 1$	M1 for a complete method to find the gradient M1 for a method to find the c in $y = mx + c$ A1 $y = 2x + 1$

3.

27		A and D	C1 in any order

OCR Thursday 07 November 2019- Morning (Non-Calculator) Foundation Tier

4.

23		$y = 4x + 1$ final answer	3	**B2** for final answer $4x + 1$ OR **M2** for using (1, 5) correctly in $y = 4x + c$ **oe** or **M1** for $y = 4x + c$ **oe** or $y = 4x + k$ **oe** k any numerical value	Allow equivalent 3 term equation for 3 marks If $y = 4x + c$ and $y = mx + 4$ are seen, mark as choice

OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

5.

11	(a)		4 points plotted and a ruled line joining	2	**B1** for 3 points correctly plotted	Line at least between (0, 100) and (150, 25) Use overlay as guide. ½ square accuracy
	(b)	(i)	198 to 202	1	Do not FT their line	
		(ii)	Battery usage remains the same or Battery can be used right to 0% or Trend or pattern continues	1	Accept For every 50 km it uses 25%	
	(c)	(i)	$-\dfrac{1}{2}$ oe or −[0].5	1		Ignore units
		(ii)	100	1	Accept 0, 100	
	(d)		$-\dfrac{1}{2}d + 100$	1	**FT** *their* **(c)(i)**d + *their* **(c)(ii)**	Accept any letter for d (except c)
	(e)	(i)	−5	2	**FT** *their* **(d)** if linear in d. **B1** for correct substitution of 210	Expect $-\dfrac{1}{2}\times 210 + 100$ Accept any letter for d (except c)

		(ii)	Impossible [as battery cannot have negative charge] oe	1	**FT** *their* **(i)** only if *their* equation gives negative outcome	

6.

12	(a)	(0, 1)	2	**B1** for (0, ..g..) $g \neq 1$ or **M1** for $y = 2x + 1$ or $y - 2 \times 0 = 1$	
	(b)	4	3	**B1** for $c = -2$ or **M1** for $y = 3k - 2$ $k \neq 0$ And **M1** for $10 = 3k - 2$	**B1** soi $3x - 2$ or 3 x number − 2 Allow x for k

AQA Tuesday 19 May 2020 – Morning (Non-Calculator) Foundation Tier

7.

Q	Answer	Mark	Comments
17	$y = 3x$	B1	

AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

8.

Q	Answer	Mark	Comments
21	$y = 5x - 2$	B1	

AQA Thursday 6 June 2019 – Morning (Calculator) Foundation Tier

9.

	(0, 3)	B1	
15(a)	**Additional Guidance**		

	(−3, 0)	B1	SC1 (−3, 0) in (a) and (0, 3) in (b) or (3, 0) in (a) and (0, −3) in (b)
15(b)	**Additional Guidance**		
	(−3, 0) in (a) and (0, 3) in (b)		(a) 0 (b) SC1
	(3, 0) in (a) and (0, −3) in (b)		(a) 0 (b) SC1

AQA Thursday 11 June 2019 – Morning (Calculator) Foundation Tier

10.

	Alternative method 1		
	$4 \times 5 + c = 23$	M1	oe $20 + c = 23$
	$c = 3$	A1	implied by (0, 3) or 3 shown as y-axis intercept
	$y = 4x + 3$	A1	SC1 $y = 4x + c$ $c \neq 3$
	Alternative method 2		
	$y - 23 = 4(x - 5)$	M1	oe
	$y - 23 = 4x - 20$	M1dep	
	$y = 4x + 3$	A1	SC1 $y = 4x + c$ $c \neq 3$
28	Additional Guidance		
	If 3 is clearly linked to c in $y = mx + c$ condone M1A1		
	$4x + 3$ on answer line, $y = 4x + 3$ seen in working		M1A1A1
	$4x + 3$ on answer line, $y = 4x + 3$ not seen in working		M1A1A0
	$m = 4$, $c = 3$ on answer line, $y = 4x + 3$ seen in working		M1A1A1
	$m = 4$, $c = 3$		M1A1A0
	$y = mx + 3$		M1A1A0
	$23 = 4 \times 5 + 3$ embedded value for c		M1A0A0
	$4x + c$ on answer line with $c \neq 3$		M0A0A0

AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier

11.

	(3, 0)	B1	
16	Additional Guidance		