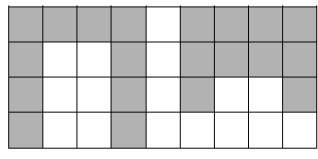


AQA PiXL Practice Paper 2 – Foundation Mark Scheme

1	(a)	46009	B1	46,009 but B0 for 46.009
	(b)	Any number in range 2000 to 3000	B1	Do not allow 2000 or 3000
	(c)	1, 2, 5, 10	B2	B1 For 3 correct
	d)(i)	6790	B1	
	d)(ii)	6800	B1	
2	a)	Green	B1	
	b)	$\frac{5}{15}$ or $\frac{1}{3}$	B1	
	c)	0	B1	Zero, Impossible
	d)	Mark at $\frac{8}{15}$	B1	± 2 mm
3	(a)	2.68328	1	B1
	(b)	373.248	1	B1
	(c)	14	1	B1
	(d)	4a + 8b	2	B1 for 4a or 8b seen Or B2 for both parts correct accept either order
	(e)	1/2	3	B1 for 6w or 3 seen B1 for 6w = 3 A1 for $\frac{1}{2}$ accept 3/6
4	a)(i)	$-5 + 8 (= 3)$	B1	oe eg, $8 - 5 (= 3)$, $8 + - 5 (= 3)$
	a)(ii)	$-2 - 3 - 4 (= -9)$	B1	
	b)(i)	Correct values	B1	eg, 10 and 6
	b)(ii)	Correct values	B1	eg, -2 and 0
5	Correct orientation, size and position		B2	B1 Correct orientation and size below mirror line, but wrong position
				B1 Correct position and a reflected shape, some incorrect lengths but at least 4 vertices correct. 2 examples shown
6	(a)	60 (answer may be on diagram)	B1	60.0
	(b)	Drawing ft their(a) for arrow	B1 ft	Allow correct arrow here even if part(a) is not attempted or part (a) is wrong Must be an arrow drawn but it can slope

7	(a)(i)	(£) 15	B1	
	(a)(ii)	Company A	B1	
		Cheaper or only £ 10 or £ 5 less	B1	
8		$(x =) 55^\circ$	B1	
		$(y =) 55^\circ$	B1	
		$180 - 55 - \text{their } y$	M1	
		$(z =) 70^\circ$	A1ft	
9	(a)	180	B1	
	(b)	B	B1	
	(c)	070 or 70	B1	68 to 72, 068 to 072
	(d)	100	B1	
10		2.4292704.....	B2	B2 correct answer B1 if top or bottom is calculated correctly
11	(a)	16	B1	
	(b)	27.50	B1	27.5 scores B0
	(c)	$\frac{5}{16}$	B1	
	(d)	$1 - \text{their } \frac{5}{16}$	B1ft	
	(e)	$59 - 8 =$	B1	51
12		$3 \times 16200 \div 100$	M1	oe
		486	A1	SC1 For 16686 unless from fw when scores both marks
13	(a)	Correct number of tiles 6 and 8	B1	Allow different types of shading or striping; but B1total for correct 6 and 8 parts and no shading or incorrect shading
		Correct discriminatory shading of their 6 and their 8 (must not be of pattern 1, 2 or 3)	B1ft	
	(b)	Shaded 6 and 7 and striped 8 and 10	B1	
		Total 14 17	B1ft	For adding their 6 and their 8, and their 7 and their 10
	(c)	32	M1	Continuing to add on 3 with a max. of one arithmetic error and at least 3 terms
A1			SC1 12 + 20	

14	(a)	(2, 72) circled	B1	
		Indicates away from pattern	B1	oe Not close to line of best fit Outlier
	(b)	Best fit line drawn	B1	From (1, 15) – (1, 25) To (5, 65) – (5, 80)
	c(i)	Read off at 4 using their line of best fit	M1	eg, 52 Allow 54 to 62 with no line of best fit
		Their 52 – 40	A1	eg, 12
c(ii)	Quite a small sample or mention of any other variable that could confound	B1	oe	
15	(a)(i)	Too vague	B1	oe
	(a)(ii)	Not enough choices or choices overlap	B1	oe
	(b)	Response section that covers values from 0 to at least 5 with no missing values and no overlapping values	B1	
	(c)(i)	Too small a sample or other sensible reason	B1	eg, may not have anyone whose surname begins with X or Z
	(c)(ii)	Method 2, all patients have equal chance	B1	
16			B2	B1 Any enlargement of 3 or enlargement from (0, 6) with sf 2
17			B3	Allow front and side elevations to be transposed Allow Plan to be a rotation. B1 for each

18	(a)	$2 \times 4 \times 5$	M1	Do not allow fw eg, 6×40 is M0
		40	A1	40^3 is M1A0 with no working $40 \times 40 \times 40 = 40^3$ is M0A0
	(b)	$\text{Length}^3 = 216$	M1	$\sqrt[3]{216}$
		6	A1	Allow embedded answer eg, $6 \times 6 \times 6 = 216$ unless contradicted on answer line when only award M1A0
19	$47 \div 5$	M1	Sight of 9.4 and/or 37.6 is M1	
	Adam 37.60 Beth 9.40	A1	37.6 and/or 9.4 is M1A0 Reversed answers scores M1A0	
20	$360 \div 5$	M1	108 or $540 \div 5$	
	72	A1		
21	$17^2 = x^2 + 15^2$ or $289 = x^2 + 225$	M1	oe $17^2 - 15^2 (= 64)$ or $289 - 225$	
	$\sqrt{17^2 - 15^2}$	M1 dep	$\sqrt{\text{their } 64}$	
	8	A1		
22	Two correct trials [2.35, 2.45] which bracket 29 and $x = 2.4$ for final answer	B4	B3 As B4 response but $x = 2.4$ not the final answer B2 Two correct trials [2.35, 2.5] which bracket 29 B1 Any one correct trial	
23	Correct heights plotted or shown	B1		
	Fully correct frequency polygon	B1	Midpoints used and straight lines intended to join them Allow midpoints to be at [24.5, 26] [34.5, 36] etc SC1 for one height plotted incorrectly but midpoints used in an otherwise correct frequency polygon	
24	$10+23+39 = 72$, $360/72 = 5$, scale x5	B1		
	Degrees $10 \times 5 = 50^\circ$, $23 \times 5 = 115^\circ$, $39 \times 5 = 195^\circ$	B1		
	Sectors drawn correctly +/- 1°	B1		
25	9 different combinations Soup/burger Soup/pizza Soup/pasta Burger/fruit Burger/ice cream Pizza/fruit	B2	A1 for answer 9 B1 for combinations listed even if 1 omission or repeat,	

	Pizza/ice cream Pasta/fruit Pasta/ice cream			
26	(a) Thursday	B1		
	(b) 3 hours each flight	B1		
27	(1, -1) (1,-5) (3,-5)	B2	B1 correct shape B2 correct shape and position	
28	3 tessellations	B2	B1 for 3 correct shapes B1 for correct and tessellate	
	Vector 3 -2	B2	B1 for +3 B1 for -2 accept 3 across, 4 down	
29	$4(4 \times 11) + 2(4 \times 4) = 208$ cm ²	B3	B1 at least 3 correct side areas A1 208 B1 for correct units cm ²	
30	Mid points 5,15,25,35,45	B4	B1 mid points correct	
	Mid x f (5x5), (15x22), (25x28), (35x21), (45x4)		B1 mid-points x f	
	$25+330+700+735+180 = 1270$		B1 total	
	$1970/80 = 24.625$		A1 corect estimate for mean	