

Year 8 Autumn Core Paper A

Question	Answer	Marks	Notes and guidance
1	5 : 3	1	
	3 : 5	1	
	$\frac{5}{8}$	1	
2	Ticks first, second and fourth boxes	2	Award 1 mark for 2 boxes correctly ticked and no other errors
3	Plots all three points correctly	2	Award 1 mark for any two correct points
	Plots point at (-2,-1)	1	Allow follow through – if all points above plotted in wrong order, then award the mark for (-1, -2)
4	31.4	2	Award 1 mark for clear attempt to use a correct formula for circumference with correct values
5	Circles cards showing $3a + 4a$ and $7a - a$ and no others	1	Accept any clear indication – circled, underlined, ticked etc.
	$\frac{2}{5}$	1	Accept any equivalent form – 0.4, 40% etc. Do not accept “2 in 5”, “2 out of 5” etc. Follow through from their answer to first part i.e. if three cards indicated, accept 60% or equivalent
6	750 3 300 225	2	Award 1 mark for 2 or 3 correct answers
	e.g. “Because you can’t have half an egg”	1	Any reasonable explanation referring to eggs

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7	Indicates “No” and gives reason e.g. <ul style="list-style-type: none"> • Because $5 \neq 4$ • Because the x and y values are different 	1	Accept any clear indication – circled, underlined, ticked etc.
	Indicates “Yes” and gives reason e.g. <ul style="list-style-type: none"> • $6 - 2 \times 2 = 2$ 	1	Accept any clear indication – circled, underlined, ticked etc. Must explain why – do not accept incomplete explanations such as “Because it fits the equation”
8	250	1	Accept 250.00, but not 250.0
	18	2	Accept 18.00, but not 18.0 Award 1 mark for clear attempt at 30×60 p or equivalent
9	$0 < h \leq 10$	1	Allow use of e.g. x instead of h
	43	1	
10	HH, HT, TH, TT	1	Accept in any format e.g. table, but must be four outcomes exactly
	$\frac{1}{4}$	1	Accept any equivalent form – 0.25, 25% etc. Do not accept “1 in 4”, “1 out of 4” Follow through from their answer to first part e.g. allow $\frac{1}{3}$ for HH, TH, TT
11	$\frac{1}{8}$	2	Award 1 mark for attempt to find $\frac{3}{4} \div 6$ or equivalent calculation
12	$y = 2$	1	
	Draws $y = -2$ on the grid	1	Must reach at least as far as $(-4, -2)$ and $(4, 2)$

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13	350	3	Award 2 marks for finding 525 (number of girls) instead Award 1 mark for sight of 175 or clear attempt to find $875 \div 5$
14	$(-1, -4)$	1	
15	4.7	3	Award 2 marks for 470 000 (cm) seen Award 1 mark for clear attempt at $23.5 \times 20\ 000$
16	Correct triangle drawn (vertices at $(0, -6)$, $(4, -8)$ and $(0, -10)$)	1	
	$(0, 10)$ $(0, 14)$ $(-4, 12)$	2	Award 1 mark for any two coordinates correct
17	Says "No" and gives reason e.g. <ul style="list-style-type: none"> • No correlation • The points aren't close to a line • There's no pattern, it doesn't show a relationship 	1	
	Gives reason e.g. <ul style="list-style-type: none"> • Babies can't text • Very young people may not have a mobile phone • Older people might not use mobile phones 	1	

Year 8 Spring Core Paper

Question	Answer	Marks	Notes and guidance
1	8.1	1	
	16	1	
2	m	1	Accept any clear indication – circled, underlined, ticked etc.
	g	1	Accept any clear indication – circled, underlined, ticked etc.
	3500	1	
3	> <	2	Award 1 mark for each correct answer
4	3 : 5	1	Accept any clear indication – circled, underlined, ticked etc.
	$\frac{3}{8}$ or equivalent	1	e.g. $\frac{15}{40}$, 0.375, 37.5% etc.
	0	1	
5	a^9	1	
	b^3	1	
6	equation	1	Accept any clear indication – circled, underlined, ticked etc.
	identity	1	Accept any clear indication – circled, underlined, ticked etc.

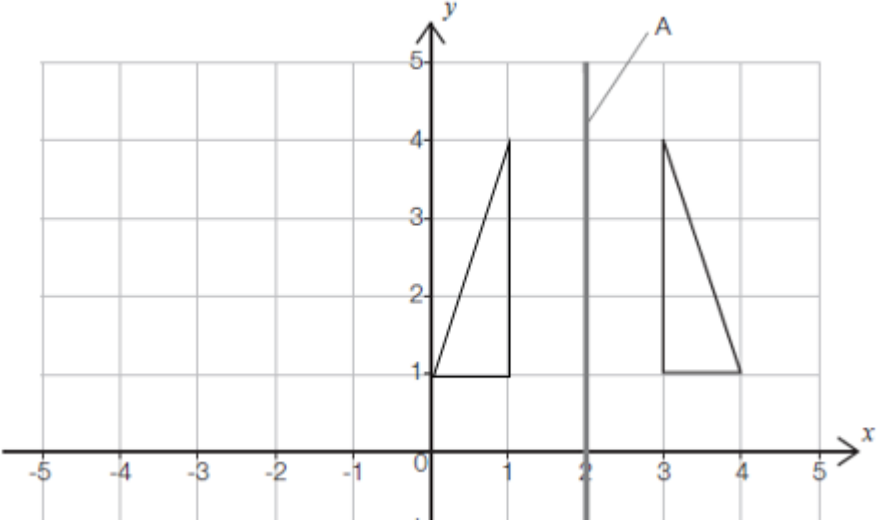
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7	$x = 95$	1	Accept just 95
	$y > 3$	2	Award 1 mark for correct first step ($4y > 12$ or $y + \frac{3}{4} > \frac{15}{4}$)
8	£156.40	2	Award 1 mark for correct method e.g. 0.23×680 Do not allow full marks for (£)156.4
9	$\frac{3}{5}$	1	Allow equivalent fractions, but do not accept any other form
	40%	1	
	30	2	Award 1 mark for correct method e.g. attempting $18 \div 3 \times 5$
10	States test 2 and shows justification e.g. $4 \text{ out of } 19 = 73.6\% > 72\%$	2	Award 1 mark for 4 out of 19 converted to a percentage or both marks converted to decimals
11	21	1	
	37 and 41	1	
	170	1	
12	1300	1	
	5.6×10^{-4}	1	
13	$5(5 + 2p)$	1	
	$11m + 3$	2	Award 1 mark for correct expansion of $3(2m + 1)$
14	16 0	2	Award 1 mark for each correct answer
	Indicates $x = 3$ and $y = 10$	1	Accept any clear indication – circled, underlined, ticked etc.

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15	States yes and justifies answer e.g. "Yes because 10% of 68 is 6.8, so the angle will be 74.8 degrees which is between 70 and 75"	2	Award 1 mark for fully correct method to increase 68 by 10% e.g. 68×1.1 etc.
16	Chooses Jenny and justifies answer e.g. " $4n^2 = 36$ but $(4n)^2 = 144$ "	2	Award 1 mark for either expression worked out correctly and no incorrect working

Year 8 Summer Core Mark Scheme

Question	Answer	Marks	Notes and guidance
1	<p>Correct reflection as shown</p> 	2	Award 1 mark for triangle reflected correctly but in the wrong position e.g. reflected in the y-axis.
	Indicates $x = 2$		1
2	Completes the table with all three values correct: -4 , -1 and 2	2	Award 1 mark for any two values correct
	Plots graph correctly i.e. straight line from $(-2, -7)$ to $(2, 5)$	2	Award 1 mark for plotting at least 4 out of 5 of their points correctly

Year 8 Summer Core Mark Scheme

3	$3(d + 2) + 3d + 1 \equiv 3d + 6 + 3d + 1 \equiv 6d + 7$	2	Condone use of = instead of \equiv Award 1 mark for correct expansion of brackets
	$6d + 7 = 52$ $6d = 45$ $d = 7.5$	2	Award 1 mark for correct first step e.g. subtracting 7 from both sides or dividing all the terms by 6
4	Completes frequencies and tallies correctly i.e. Romance 6 Comedy 8 Action 9 Horror 1	3	Award 2 marks for all frequencies or tallies correct, but other representation incorrect/missing Award 1 mark for any two correct frequencies or tallies
5	224	2	Award 1 mark for attempt to multiply 200 by 1.12
	280	2	Award 1 mark for attempt to find 65% or 35% of 800
6	Any one of: <ul style="list-style-type: none"> No time frame Overlapping response boxes Not all possible responses covered (e.g. “No box for over £50”, “No box for £0” etc.) 	1	
	Question addresses at least two of the issues above e.g. <ul style="list-style-type: none"> “How much to you spend on books per week/month?” No overlaps All possible responses covered 	2	Award 1 mark for addressing any one of the issues

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7	44	1	
	11	1	
	18	2	Award 1 mark for attempt to find the total and divide this by 5
	e.g. Mean will be affected by the outlier	1	Accept any reasonable explanation
8	75%	2	Award 1 mark for $\frac{18}{24}$ seen or implied
	16 400	2	Award 1 mark for each correct answer
9	Angles on a straight line add up to 180° Alternate angles are equal	2	Accept in either order Language must be fully correct with words in bold (or equivalent) seen e.g. do not accept: <ul style="list-style-type: none"> • Angles on a line add up to 180° • It's a straight line • They are alternate angles Award 1 mark for each correct reason
	900°	2	Award 1 mark for attempt to multiply 180° by 5
10	States a value from 15% to 20% inclusive	1	
	e.g. <ul style="list-style-type: none"> • The football team may have played more games altogether • We don't know how many games the teams played 	1	Any reasonable explanation

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11	314	2	Accept 100π or anything that rounds to 314 cm^2 Award 1 mark for attempt to use $A = \pi r^2$ with $r = 10$ seen or implied
	240	2	Award 1 mark for attempt to use $A = \frac{1}{2}(a + b)h$ with correct values or any other complete correct method.