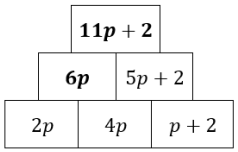
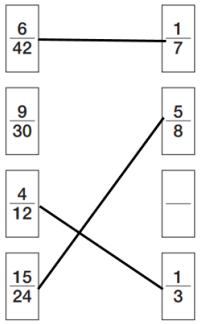
Year 7 Autumn Higher Paper A

Question	Answer	Marks	Notes and guidance
1	0, 1, 2 or 3	1	
2	6200	1	
3	$3p^2$ $8ab$	1 1	
4	$\frac{9}{5}$ correctly indicated on the number line $1\frac{4}{5}$	1 1	
5	0.125 64% e.g. 6001, 5955, 5999.2, 6049.99	1 1 1	Any value x in the range $5950 \leq x < 6050$
6	18 13.5	1 1	
7	Indicates $10 - n$ Indicates n^2 e.g. 1	1 1 1	Accept any clear indication e.g. circled, underlined etc. Any value n in the range $n < \frac{4}{3}$

Year 7 Autumn Higher Paper A

8	8.08 2.828	1 1	
9	$\frac{3}{10}$ 19	1 1	Allow any equivalent fraction e.g. $\frac{30}{100}$ but do **not** allow 0.3 nor 30%
10	 $m = 5$	1 2	Completes pyramid with **both** terms correct Allow one mark for complete process with one error e.g. • $8m = 35$(error), $m = \frac{35}{8} = 4.375$ • $7m = 35, m = 8$ (error)
11	207 0.25 95	1 1 1	Allow $\frac{25}{100}$
12	$\frac{73}{1000}$ or 0.073	1	Allow any equivalent value
13	49.5	1	
14	26	3	3 marks for fully correct with no wrong working.

			If incorrect, marks as follows: M1 – correct method to find value of pentagon e.g. "55 – 43" or "12" seen M1 – correct method to find value of square e.g. "50 – 2 x their result to 55 – 43" seen
15	 $\frac{3}{10}$	2 1	Matches the three given fractions to their simpler equivalents. Allow one mark for two correctly matched Completes last box with $\frac{3}{10}$ (may be matched to $\frac{9}{30}$ but not necessary. Do **not** allow if matched to a different fraction)
16	e.g. "Divide by 3" or "÷ 3" $12t$	1 1	
17	21.65 2×10^7	1 1	

Year 7 Autumn Higher Paper A

18	e.g. $\frac{3}{\mathbf{9}} = \frac{\mathbf{10}}{30}$ or $\frac{3}{\mathbf{45}} = \frac{\mathbf{2}}{30}$ etc. $\frac{100}{\mathbf{40}} = \frac{\mathbf{250}}{100} = 2.5$	1 1 1	Any two integers whose product is 90. 1 mark for 40, 1 for 250 – these marks are independent of each other
19	0.000 000 07 (0.000 000 7) 7 000 000 70 000 000	1	Accept any clear indication e.g. circled, underlined etc.

Year 7 Spring Higher Paper

Question	Answer	Marks	Notes and guidance
1	–11 in top row –6 in middle row 2 in bottom row	2	Award 1 mark for any two correct values.
2	32	2	Award 1 mark for fully correct method e.g. attempt to subtract 15 from 79 and divide their answer by 2
3	Chooses A with 11 and 10 seen	2	Award 1 mark for: • 11 and 10 correctly evaluated but incorrect or no decision • One value correct and correct decision made for their values
4	92 p	3	Award 1 mark for correct method to work out the total cost as 39×28 Award 1 mark for correct method to subtract £10 from their answer to 39×28, must be consistent units either all in £ or all in pence. Award 1 mark for correct answer.
5	$\frac{8}{21}$ and $\frac{13}{21}$ on second row $\frac{4}{7}$ on bottom row	2	Award 1 mark for any two correct values.

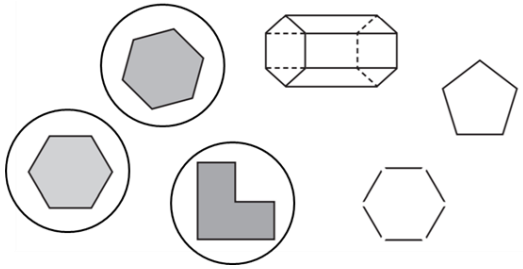
Year 7 Spring Higher Paper

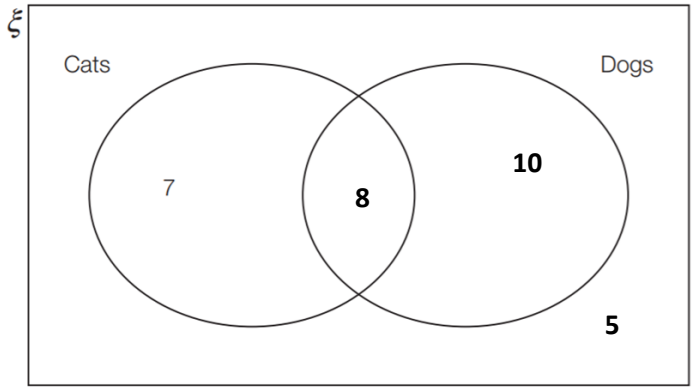
6	11	2	Award 1 mark for working out $ab = 6$ and attempting to find c such that $-5 + c = 6$
7	136	2	Award 1 mark for fully correct method i.e. attempting to add 473 and 250 and then to subtract 587 from the result.
8	7.8	1	
	3.7	1	
	–4.5	2	Award 1 mark for correct first step e.g. $\frac{c}{3} = -1.5$ or $c + 10.5 = 6$
9	$3a - 3b$ in middle right circle $a - 4b$ in bottom right circle	1 1	
10	36	2	Award 1 mark for fully correct method i.e. $0 \times 6 + 1 \times 9 + 2 \times 4 + 4 \times 1 + 5 \times 3$ (could also include 3×0)
11	20	3	Award 1 mark for $B = 16$ Award 1 mark for A correctly evaluated as 2 × their value of B. Award 1 mark for C correctly evaluated as 640 ÷ their value of A.

12	450	2	Award 1 mark for fully correct method with no more than one numerical error e.g. • correct use of trapezium formula • splitting shape into rectangle and triangle, finding the areas and adding.
13	2.8×10^6 (or 2 800 000)	2	Award 1 mark for converting both numbers correctly to ordinary from and attempting to subtract or converting 2×10^5 to $0.2 \times 10^6$and attempting to subtract.
14	2.6 m	2	Accept 260 cm. Award 1 mark for fully correct method i.e. finding total length by multiplying 2.7 by 3 and attempting to subtract the other two lengths using consistent units.
15	$1\frac{4}{15}$	2	Award 1 mark for $\frac{19}{15}$ or equivalent
	$\frac{1}{12}$	2	Accept any exact equivalent form. Award 1 mark for fully correct method i.e. valid attempt to add $\frac{3}{4}$ and $\frac{1}{6}$ and subtract the result from 1.
16	2.725	1	Accept any equivalent form.
	$2\frac{11}{15}$	2	Accept any equivalent form. Award 1 mark for correct method with no more than one numerical error.
	$\frac{p}{2}$	1	Accept any equivalent form e.g. $\frac{5p}{10}, 0.5p$ etc.

Year 7 Summer Higher Paper

Question	Answer	Marks	Notes and guidance
1	Indicate yes with correct explanation e.g. "It only has two factors"	1	
	83 OR 89	1	
2	26	2	Award 1 mark for fully correct method i.e. attempts to divide 364 by 2 and then divide the result by 7 (allow divisions in either order)
3	e.g. 0.751, 0.76 etc.	1	Any decimal x such that $0.75 < x < 0.78$
4	850.2 327	1 1	
5	8.25	2	Accept $8\frac{1}{4}$ etc. Award 1 mark for fully correct method i.e. attempt to divide 11 by 2, multiply the result by 3 and divide this result by 2 OR 16.5 seen
	18	1	
	$\frac{1}{24}$	1	
	62.41	2	Award 1 mark for fully correct method with no more than one numerical error

6	Indicates the correct shapes e.g. 	1	Must indicate all three hexagons and no extras.
	1080°	2	Award 1 mark for fully correct method e.g. 6 x 180° seen
7	Correct angle drawn at B (292°)	1	Allow 290 – 294°
	Draws equilateral triangle of length 7cm with construction lines clearly visible	2	Award 1 mark for equilateral triangle of any length with construction lines clearly visible OR at least one side of 7cm AND at least one correct arc
8	–8	2	Award 1 mark for correct first step e.g. $x + 3 = -5$ or $\frac{x}{5} = -1 - \frac{3}{5}$
	$3\frac{17}{20}$	2	Award 1 mark for any fully correct method
	$7a + 45$	1	

9	129° with fully correct reasons e.g. $\angle BCE = 51°$ (Corresponding Angles are equal) So $x = 129°$ (Angles on a straight line add up to 180°)	3	Award 2 marks for correct answer with no incorrect working but e.g. full reasons not given Award 1 mark for one correct step in working e.g. using angles on a straight line, corresponding or alternate angles – may be seen on diagram, reason need not be stated if scoring just 1/3
10	Correctly completes diagram:  	2	Award 1 mark for two of the three regions correct.
	$\frac{7}{30}$	1	

11	9	1	
	6.5 million, 2.8×10^8, 560 000 000, 3 billion, 2.4×10^{10}	2	Accept list of numbers in any form or mixture of forms Award 1 mark for clear attempt at writing all the numbers in the same format
	560 000 000	1	Follow through the middle item of their ordered list – must have made some attempt at ordering
12	Completes the spinner with 2, any odd prime, any square of an even number e.g. 2, 3, 16 2, 11, 36 etc.	2	Award 1 mark for any two of 2, any odd prime, any square of an even number
13	Complete proof e.g. $2x + x + 20 + 55 = 180$ $3x + 75 = 180$ $x = 35$ Angles are 55, 55 and 70 Two are equal, so the triangle is isosceles	3	Award 1 mark for forming a correct equation in x Award a second mark for solving equation correctly and attempting to find the angles in the triangle