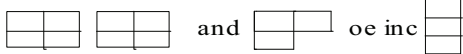
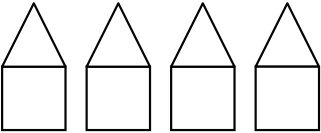
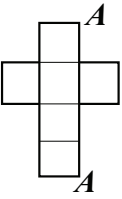


Paper 5501

No	Working	Answer	Mark	Notes
7	(i) (ii) (iii)	sphere cylinder pyramid	1 1 1	B1 B1 Accept circular prism B1 Condone omission of “triangular” Accept tetrahedron
8	(a)(i) (ii) (b) (c)	40 50 5 complete symbols 	2 1 1	B1 cao B1 cao B1 cao B1
9	(i) (ii) (iii) (iv)	9, 37, 56, 59, 75 0.067, 0.56, 0.6, 0.605, 0.65 -10, -6, -4, 2, 5 $\frac{2}{5}, \frac{1}{2}, \frac{2}{3}, \frac{3}{4}$	5	B1 cao B1 cao Ignore trailing zeros B1 cao B2 for all 4 correct (B1 for any 3 in correct order) SC B1 for all 4 in reverse order (applies to(iv) only)
10	(a) (b) (c) (d)	 Plotting (4, 24) 60 $m = 6n$	1 1 1 2	B1 B1 ft from their matchsticks B1 cao B2 for $m = 6n$ oe (B1 for $6n$ oe or $m =$ multiple of n except $m = n$)
11	(i) (ii) (iii) (iv)	6, 12 4, 16 3, 4, 6 or 3, 4, 6, 12 8, 27	4	B1 cao B1 cao B1 Condone omission of 12 B1 cao

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No	Working	Answer	Mark	Notes															
12		2.43	4	B1 for 36 or 0.36 B1 for 96 or 0.96 B1 for 125 or 1.25 If none of first 3 B1s awarded then SC B1 for four 24s and five 25s seen OR 4×24 and 5×25 seen B1 for 2.43 cao															
13	(a)(i)	Edinburgh and Plymouth	3	B1 for Edinburgh or -7 B1 for Plymouth or 5															
	(ii)	12		B1ft from (i) if one positive and one negative															
	(b)	Cardiff and Belfast London and Plymouth	2	B1 for Cardiff and Belfast OR -6 and -4 B1 for London and Plymouth OR 3 and 5															
14		5 9 8	3	B1 cao B1 cao B1 cao															
15	(a)		2	<table border="1" data-bbox="1357 810 1823 1023"> <thead> <tr> <th>✓</th> <th>×</th> <th></th> </tr> </thead> <tbody> <tr> <td>2</td> <td>0</td> <td>B2</td> </tr> <tr> <td>1</td> <td>0</td> <td>B1</td> </tr> <tr> <td>1</td> <td>1</td> <td>B1</td> </tr> <tr> <td>2</td> <td>1</td> <td>B1</td> </tr> </tbody> </table>	✓	×		2	0	B2	1	0	B1	1	1	B1	2	1	B1
✓	×																		
2	0	B2																	
1	0	B1																	
1	1	B1																	
2	1	B1																	
	(b)	$2 \times 2 \times 2$	8	2 M1 for $2 \times 2 \times 2$ A1 for 8 cao															
16	(a)	30	1	B1 cao															
	(b)	3	1	B1 cao															
	(c)	$2 \times 29 = 58$ $5 \times 30 = 150$ $2 \times 31 = 62$ $1 \times 32 = 32$ $\frac{302}{10} = 30.2$	30.2	3 M1 for freq \times no pins M1 (dep on 1st M1) for totalling and $\div 10$ A1 for 30.2 cao															

Paper 5501

No	Working	Answer	Mark	Notes
17		$\begin{array}{r} 7 \\ 5 \\ 5 \quad 13 \quad 33 \\ 52 \quad 23 \end{array}$	3	B3 all correct (B2 for 4, 5 or 6 correct B1 for 2 or 3 correct)
18 (a)(i) (ii) (iii) (iv) (b)		$\begin{array}{l} 4c \\ p^4 \\ 8g \\ 10pr \text{ OR } 10rp \\ 10y - 15 \end{array}$	4 1	B1 oe B1 cao B1 oe B1 B1 cao Accept $10y + - 15$
19		$\frac{2}{3}$	3	M1 for 3 rows (9 squares) shaded M1 for 2 columns (10 squares) shaded A1 for $\frac{2}{3}$
	$\frac{3}{5} = \frac{9}{15}$ $\frac{2}{3} = \frac{10}{15}$	$\frac{2}{3}$	3	M1 for $\frac{3}{5} = \frac{9}{15}$ M1 for $\frac{2}{3} = \frac{10}{15}$ A1 for $\frac{2}{3}$
	$\frac{3}{5} = 0.6$ $\frac{2}{3} = 0.66 \text{ or } 0.67 \text{ or better}$	$\frac{2}{3}$	3	M1 for $\frac{3}{5} = 0.6$) Accept) M1 for $\frac{2}{3} = 0.66 \text{ or } 0.67 \text{ or better}$) percentages A1 for $\frac{2}{3}$

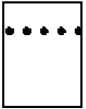
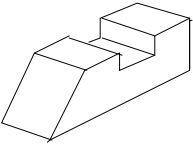
Paper 5501

No	Working	Answer	Mark	Notes
20	<p>(a)</p> $\begin{array}{r} 955 \\ \underline{48} \text{ OR } \underline{955} \\ 7640 \qquad 240 \\ \underline{38200} \qquad 2400 \\ \underline{45840} \qquad \underline{43200} \\ \qquad \qquad \underline{45840} \end{array}$ <p>(b)</p> $\begin{array}{r} 14.5 \\ 48 \overline{)696.0} \\ \underline{48} \\ 216 \\ \underline{192} \\ 240 \\ \underline{240} \end{array}$	458.40	3	M1 for complete correct method (condone one computational error) A2 for 458.40 cao (A1 for digits 4584 OR ft if M1 awarded)
21	<p>(a)</p> <p>(b)</p>	<p>$12x$</p> <p>$12x + 10y$</p>	<p>1</p> <p>2</p>	<p>B1 oe</p> <p>B2 oe ft from (a)</p> <p>(B1 $12x + \text{multiple of } y \text{ or } 10y \text{ seen}$)</p> <p>SC B1 for $x = 12x + 10y$ OR $y = 12x + 10y$</p>

Paper 5501

No	Working	Answer	Mark	Notes
22	$\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$ $1 - \frac{7}{12} = \frac{5}{12}$	$\frac{5}{12}$	3	M1 for $\frac{4}{12}$ and $\frac{3}{12}$ oe A2 for $\frac{5}{12}$ oe (A1 for $\frac{7}{12}$) B1 for $1 - \left(\frac{1}{3} + \frac{1}{4}\right)$ correctly evaluated
	$1 - \frac{1}{3} = \frac{2}{3}, 1 - \frac{1}{4} = \frac{3}{4}$ $\frac{8}{12} - \frac{3}{12} = \frac{5}{12} \text{ or } \frac{9}{12} - \frac{4}{12} = \frac{5}{12}$	$\frac{5}{12}$	3	B1 for $\frac{2}{3}$ or $\frac{3}{4}$ seen M1 for $\frac{8}{12} - \frac{3}{12} = \frac{5}{12}$ or $\frac{9}{12} - \frac{4}{12} = \frac{5}{12}$ A1 for $\frac{5}{12}$ oe
		$\frac{5}{12}$	3	M1 for 0.25 and 0.33 or better A1 for 0.58 or better A1 for $0.41\dot{6}$ or recurring
23	(a) (b)(i) $180 - (54 + 54)$ (ii)	54 72 Reason	1 3	B1 cao M1 for $180 - (54 + 54)$ A1 ft from (a) if $x < 90$ B1 for mentioning isosceles and equal or base angles or equal sides and equal or base angles

Paper 5501

No	Working	Answer	Mark	Notes
24	(a)	Bryani	2	M1 for 4×9 or $4 \times 3 \times 3$ or $4 \times x \times x$ or square x first or square 3 first A1 SC 4×3^2 with Bryani scores B2
	(b)	64	1	B1 cao
25	(a)	 <p>dotted line may be solid</p>	3	B2 for rectangle base 3 squares and height 4 squares (B1 for rectangle with one correct dimension) B1 for horizontal line 1 cm from top) SC B2 for completely correct elevation on its side
	(b)		2	B2 for perspective drawing showing slant face and cutout B1 for perspective drawing with either slant face cutout omitted
26	(a)	20×2 or $\frac{20}{30} \times 60$ or $20 \div \frac{1}{2}$	2	M1 for 20×2 or $\frac{20}{30} \times 60$ or $20 \div \frac{1}{2}$ A1 cao
	(b)	$\frac{20}{60}$ or $\frac{1}{3}$ or 20 minutes	2	M1 for $\frac{20}{60}$ or $\frac{1}{3}$ or 20 minutes seen A1 for correct line SC If M0, B1 for line from (45, 20) to $(t, 0)$ where $t > 45$ or B1 for a line of the correct gradient.