

Delta 3 – Unit 7 Revision Answers

Q1.

Question	Working	Answer	Notes
		8	B1 cao

Q2.

Paper 1MA1: 1H			
Question	Working	Answer	Notes
		4 m ²	B1 substitution into formula eg $1.5 = \frac{12}{A}$ A1 4 (oe) stated C1 (indep) units stated

Q3.

Question	Working	Answer	Mark	Notes
	Volume = $\frac{5 \times 12}{2} \times 15$ Mass = $\frac{5 \times 12}{2} \times 15 \times 6.6$	2970	3	M1 $\frac{5 \times 12}{2} \times 15$ (=450) M1 (dep on 1 st M1) '450' × 6.6 A1 cao SC: If no marks awarded then award B1 for an answer of 5940

Q4.

Question		Working	Answer	Mark	Notes
			No supported by correct values	4	P1 process to find volume of wood, e.g. $3 \times 20 \times 120 (= 7200)$ P1 process to find a density, e.g. $8000 \div "7200"$ or $1030 \div 1000$ P1 complete process to find two densities for comparison P1 No with a comparison of the correct densities, 1.03 and 1.11... or 1030 and 1111

Q5.

Question	Answer	Mark	Mark scheme	Additional guidance
	2 hours 45 minutes	P1 P1 A1	for $30 \div 24 (= 1.25)$ or $12 \div 8 (= 1.5)$ for finding the sum of their two times eg "1.25" + "1.5" ($= 2.75$) or 165 (minutes) cao	May be written in hours and/or minutes or 3 h 15 min or 2 h 75 min

Q6.

Question	Working	Answer	Mark	Notes
		0.0654011543	B1 M1 A1	for stating bound for p, 5.365 or 5.375 or bound for s, 2.85 or 2.95 for use of two lower bounds in equation for 0.0654...

Q7.

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Question		Working	Answer	Mark	Notes
			0.063	3	B1 for 252.5 or 247.5 or 3950 or 3850 M1 for $247.5 \div 3950$ or ft “lower bound for 250” $\div$ “upper bound for 3900” A1 for 0.062–0.063 (from correct working)

Q8.

Question		Working	Answer	Mark	Notes
	(a)		4.25	1	B1 cao
	(b)		7.20-7.21	3	B1 4.35 or 0.35 M1 for $4.35 + \frac{1}{0.35}$ A1 $7.2(0)-7.21$ or $\frac{1009}{140}$ from a correct method seen

Q9.

Question	Working	Answer	Mark	Notes
		$3.45 \leq x < 3.55$	B2 (B1)	cao for 3.45 and 3.55

Q10.

Question	Working	Answer	Mark	Notes
(a)		1300	B1	cao
(b)		4 - 5	B1	
(c)		1.4	M1 A1	for taking readings from graph, e.g. 0.6 or 2 or finds the difference from their readings cao
(d)		graph	B1 B1	for showing a horizontal line from (13 40, 3.5) to (13 50, 3.5) for a line that terminates at (14 15,0) and starts from (13 50, 3.5) or starts from the end of their graph so far, e.g. from (13 40, 3.5)

Q11.

Paper 1MA1: 2F			
Question	Working	Answer	Notes
(a)		graph	M1 for method to start to find distance cycled in 36 mins, eg. line drawn of correct gradient or $15 \times \frac{36}{60}$ C1 for correct graph from 9.00 am to 9.36 am C1 for graph drawn from "(9.36, 9)" to (10.45, "9" + 8)
(b)		4.5	M1 for 18×0.25 A1 cao

Q12.

PAPER: 1MA0/1H				
Question	Working	Answer	Mark	Notes
(a)		5	1	B1 cao
(b)		Lines added	2	B1 for a horizontal line from (5, 8) to (6.30, 8) B1 for a single straight line with the correct gradient and length, down to the time axis eg (6.30, 8) to (8.30, 0)

Q13.

Question		Working	Answer	Mark	Notes
	(a)	9×6	54	2	M1 for a method to find the speed e.g $9 \div 10$, $9 \div 0.16$ A1 cao
	(b)		Graph completed	3	B1 horizontal line from (30,21) to (45,21) M1 for a complete method to show the return journey is 30 mins or $\frac{1}{2}$ hour evidenced by the line on the graph or by calculation A1 Correct line drawn from Luscoe (x,21) to (x + 30,0)