Question			Answer	Marks	Part Marks and Guidance	
1	**(a)**		81	2	**M1** for $45 \times \dfrac{9}{5}$ oe or for 9 minutes for 1 km oe	
	(b)		6.6 or $6.\dot{6}$ or 6.7 or $6\dfrac{2}{3}$ or 7	3	**M2** for $\dfrac{5}{0.75}$ oe or $\dfrac{9}{their(a)/60}$ oe Or **M1** for $\dfrac{5}{45}$ oe or $\dfrac{9}{their(a)}$ oe	eg $\dfrac{60}{9}$

Question			Answer	Marks	Answer and Guidance	
2					Ignore any calculations or conclusions about energy	
			Full correct conclusion with correct working, clearly laid out **or** a fully correct, justified and reasoned solution based on clear estimates	5		*Corny Flakes* for 100g, 10g, 1g Sugar = 21, 2.1, 0.21 Fat = 3, 0.3, 0.03 Fibre = 3, 0.3, 0.03 Salt = 1, 0.1, 0.01
			As above but with ≤ 2 errors or if solution is not easy to follow	4 – 3	For the lower mark $\geq$ half of the required calculations will be correct and some conclusions (correct for their calculations) will be drawn **or** a full solution based on estimated amounts (eg using 3 or 3.3 instead of $\frac{10}{3}$)	*Super Fibre* for 10g, 1g Sugar = 2.77, 0.277 Fat = 0.94, 0.094 Fibre = 0.84, 0.084 Salt = 0.01, 0.001 *Corny Flakes, Super Fibre* for 300g
			Half of the required calculations will be correct	2 – 1	For the lower mark there will be • one correct calculation • or an attempt to draw conclusions based on wrong (but relevant) calculations • or a realisation that they need to compare equivalent amounts of each cereal	Sugar = 63, 83.1 Fat = 9, 28.2 Fibre = 9, 25.2 Salt = 3, 0.3 Therefore the makers are wrong on sugar and fat (ie *SF* has more*)* but right on fibre (*SF* has more) and salt (*SF* has less)
			No relevant comment eg subtracting raw data with or without conclusions	0		

3			70/42 or 1.66 – 1.67 or 1.7 [gallons used]	**M1**	in principle: **M1** for dealing correctly with any two elements of $\dfrac{70}{42} \times 4.5 \times 121.9$,	Or **M1** for 121.9 × 4.5 or 548.(55) [cost of one gallon, in pence] or 70/42 or 1.66 – 1.67 or 1 7 [gallons used]
			FT *Their* gallons × 4.5 or 7.47 to 7.65 [litres used]	**M1**	**M1** for correctly combining the result with a third, **M1** for correctly combining the result with the fourth. For A1 accept unrounded answers as well as answers to nearest penny.	then **M2** for 70/42 or 1.66 – 1.67 or 1.7 [gallons used] and *their* (1.66 – 1.67) × *their* 548.(55)
			FT *Their* litres for 70 miles used × 121.9 or × 1.219	**M1**		proportion methods:
			9.09 to 9.17 or 9.32 to 9.34	**A1**	or **B4;** **B3** for 909 to 917	7.5 litres used in 70 miles earns M2– then 7.5 × 121.9 earns last M1
			Or for 42/4.5 or 9.3(3...) [miles per litre]	**or** **M1**		42 miles costs 548.(55)[p] earns M2 then [×] 70/42 or informal proportion used correctly earns last M1
			70 ÷ *their* mpl or 7.5 [litres used]	**M1**		M0 for just 70 × 121.9
			t*heir* litres for 70 miles used × 121.9 or × 1.219	**M1**		allow B3 for 8.7768 rot to 2 dp or more, [from premature approxn to 1.6 gallons used]
			9.09 to 9.17 or 9.32 to 9.34	**A1**	or **B4** for 9.09 to 9.17	

4	(a)		1.40[p]	3	**B1** for 7.34 seen **And B1** for 4.68 or 2.66 seen	Answer 1.4 implies B1B1
	(b)		173 or 174	3	**B2** for answer 173.4 to 173.5 **Or M1** for 0.83 × 209 oe soi	Condone For M1 0.17 × 209 oe soi

5	(a)	(i)	13	3	**B2** for $12\frac{3}{4}$ or $\frac{51}{4}$ or 12.(…) Or **M1** for $17 \times \frac{3}{4}$ or $51 \div 4$ or 17×0.75 or 4.25×3 And **B1FT** for rounding **up** any non-integer answer >1 If ratio method used **B2** for 12 pizzas = 16 scouts Or **B1** for 3 pizzas = 4 scouts or better	$\frac{51}{68}$ implies M1 Calculation doesn't need to be attempted for M1 If 'counting on' used (eg 0.75, 1.5, 2.25 …) award B marks if 12 pizzas = 16 scouts or for 3 pizzas = 4 scouts are reached and recorded clearly
		(ii)	2.21	3	**M2** for 2.60 – *their* 15% Or 2.60 × 0.85 with attempt at long multiplication Or **M1** for 0.26 and 0.13 seen or full method for getting 15% of 2.60 **SC2** 28.73	If *their* 13 pizzas considered allow FT for M2 or M1 provided method is clear. Condone confused units for M marks (eg 2.60- (26 + 13)) Also 221 implies M2.
	(b)		3240	2	**B1** for 100 used	