SECTION A

1	Correct reason using estimation wrong (stated or implied)	M1 A1 [2]	$20 \div 1 (= 20)$ $200 \times 1 (= 200)$ $18 \div 1 (= 18)$ (Assume correct ans to calc involving 1 unless wrong ans shown.) $200 \times 0.9 = 180$ ans needed
2	(a) 5 litres/hour (b) between 13:00 and 15:00	1 1 1 [3]	accept ±5 accept l/h or lph oe. SC1 15 **litres** in 3 **hours** oe condone limits within correct range.
3	(a) $(y =)3x+2$ (b)(i) $(y =)3x-2$ (ii) $(y =)\frac{1}{3}x+2$	1 1 1 [3]	
4	(a) 1.25 or $1\frac{1}{4}$ or $\frac{10}{8}$ or $\frac{5}{4}$ oe (b) $4\frac{5}{12}$	2 3 [5]	M1 for $\frac{1}{0.8}$ seen M2 for $3+\frac{17}{12}$ or $3\frac{17}{12}$ or $4+\frac{5}{12}$ or $\frac{53}{12}$ **or** M1 for 3 + fractions or $\frac{11}{4}+\frac{5}{3}$ or for clear attempt to use 12 or multiple as common denom. after 0 give SC1 for 4 + fractions
5	(a) BCF = 72° **and** BCD = 2 × 72 and correct calculation(s) shown. All reasons **clearly** stated eg BCF and ABC allied angles, and symmetry. (b) 9	1 1 2 [4]	Look at diagram for clarification. M1 for 360 ÷ 40
6	(a) $7x-16=2(3x+1)$ $(x =)$ 18 (b) ACB = 55 and AOB = 110 (cao)	M1 W3 1 [5]	Condone missing brackets. M1 for $7x - 16 = 6x + 2$ or ft correct expansion of their brackets.(M0 if no expansion needed) M1 correct ft of their equation to collect terms, either 'x's' or numbers (must start from x on both sides of eqn.)
7	(a) $\frac{150}{250}$ oe (b) 1200	1 2 [3]	isw after $\frac{150}{250}$ seen M1 for their(a)×2000 or 150×8
Section A Total: 25			