Topic Test 5 Mark Scheme

Basic algebra - Foundation

Q	Answer	Mark	Comments
1	35	B1	
2	6 + 3 × 2	B1	
3	$12a^2b^3$	B2	B1 for one error
4	(Electricity =) G + 10	B1	
	(Water =) $\frac{1}{2}(G + 10)$	B1ft	ft their electricity
	$12(G + G + 10 + \frac{1}{2}G + 5)$	M1	oe ft their answers
	$30G + 180$	A1	
5	$21a^2 - 63a$	B2	B1 for either $21a^2$ or $-63a$
6(a)	$14x + 21 + 24x + 36$	M2	M1 for either $14x + 21$ or $24x + 36$
	$38x + 57$	A1	FT their answers if M1 awarded
6(b)	$32y - 24 - 15y - 3$	M2	M1 for either $32y - 24$ or $-15y - 3$
	$17y - 27$	A1	Ft their answers if M1 awarded
7	$2 \times 4(f + 3)$ or $2 \times 5(f - 2)$	M1	oe
	$2 \times 4(f + 3)$ and $2 \times 5(f - 2)$	M1	oe
	$2 \times 4(f + 3) + 2 \times 5(f - 2)$ or $8f + 24 + 10f - 20$	M2	
	$18f + 4$ or $2(9f + 2)$	A1	

Q	Answer	Mark	Comments
8(a)	$9(3n - 4)$	B1	
8(b)	$12n(3n^2 - 5)$	B2	B1 for correct partial factorisation
8(c)	$10n^2m^2(3 – 5n)$	B2	B1 for correct partial factorisation
9(a)	Equation	B1	
9(b)	Identity	B1	
9(c)	Formula	B1	
10	–8, –7, –6, –4, –3, –2	B2	B1 for 5 correct and 0 incorrect or for 6 correct and 1 incorrect
11	$w = 300 + 15h$	B1	
12	Beefburger = $H + 20$ and Ice cream = $2H + 40$	B1	oe
	$H + H + 20 + 2H + 40 = 4H + 60$	M1	oe
	$280(4H + 60) = 72800$	A1	oe