

Topic Test 1 Mark Scheme

Basic algebra - Higher

Q	Answer	Mark	Comments				
1	$7n - 6n^2$	B1					
2	$a^2 - 4a$	B1					
	1						
3	5x(2x-y)	B2	B1 $x(10x - 5y)$ or $5(2x^2 - xy)$				
4	$(3x^2 +) 36x \text{ or } 36 = c^2$	M1	May be implied by 6 or –6				
	6	A1					
	-6	A1					
	1		· · · · · · · · · · · · · · · · · · ·				
5	3(4x + 2) + 3(4x + 2) + 6(x - 2) + 6(x - 2) + 6(x - 2)	M1	ое				
	36 <i>x</i> – 12	M1	Expands brackets and collects terms Allow one error				
	their (36 <i>x</i> – 12) ÷ 3	M1					
	12 <i>x</i> – 4	A1	SC2 $12x + 6$ and $6x - 12$ seen SC1 $12x + 6$ or $6x - 12$ seen				

	6x - 6k = 5x + 4	M1	
	6x - 5x = 6k + 4 or $x = 6k + 4$	M1	
6	Explanation that $6k + 4$ is an even number eg shows that both terms are divisible by 2 or 6k + 4 = 2(3k + 2)	A1	oe

Q	Answer	Mark	Comments
7	$10x^2 - 5x$ or $3x + 3$	M1	
	5x(2x-1) - 3(x+1)		
	or their $(10x^2 - 5x) - $ their $(3x + 3)$	M1	
	$10x^2 - 8x - 3$	A1	

8	21x - 3 - 6x - 24 + 2	M1	Allow one error
	15 <i>x</i> – 25	A1	
	5(3x-5)	A1	