

Topic Test 1 Mark Scheme

Algebraic fractions - Higher

Q	Answer	Mark	Comments
1	$\frac{2a^2 + 3b^2}{ab}$	B1	
2	$\frac{x}{4y}$	B1	
3	$\frac{2}{5e}$	B1	
4	$\frac{2}{xy}$	B1	
5	y^2	B1	Accept $1y^2$
6	<p>Mya's answer is correct but from wrong working. She should have factorised the top and cancelled the common bracket</p> <p>ie $\frac{(3x - y)(3x + y)}{3x - y}$ $= 3x + y$</p>	B2	<p>B1 for partial explanation Or B1 for sight of $(3x - y)(3x + y)$</p>
7(a)	$(x - 4)(x + 4)$	B1	Either order
7(b)	$(x \pm a)(2x \pm b)$	M1	Allow where $ab = 12$
	$(x - 4)(2x + 3)$	A1	
	$\frac{x + 4}{2x + 3}$	A1	

Q	Answer	Mark	Comments
8	$(3y \pm a)(y \pm b)$	M1	$ab = 2$
	$(3y - 2)(y + 1)$	A1	
	$y + 1$	A1	
9	$\frac{(3x - 2)(3x + 2)}{(4x - 1)(3x + 2)}$	M1	
	$a = 9 \ b = 4 \ c = 12 \ d = 5 \ e = -2$	A1	
10	Attempt to factorise numerator or denominator	M1	
	$(2x + 1)(x - 5)$	A1	either order
	$(2x + 1)(3x + 4)$	A1	either order
	$\frac{x - 5}{3x + 4}$	A1	