

Algebra: Quadratics, Rearranging Formulae and Identities

Non-Calculator 10 minute test 1

Q	Answer	Mark	Comments
1(a)	$3x^2 - 5x$	B2	B1 for $3x^2$ or $(-)5x$
1(b)	$x(6y - 5x)$	B1	
2(a)	a^{40}	B1	
2(b)	a^{20}	B1	
2(c)	a^{300}	B1	
3	$4 \times 3^2 - 2 \times (-4)^2$	M1	Substitutes into the formula
	$= 36 - 32$ $= 4$	A1	
4	$y + 4 = 5x$	M1	Isolates the x term
	$\frac{y + 4}{5} = x$	A1	oe
4 alt	$\frac{y}{5} = x - \frac{4}{5}$	M1	Isolates the x term
	$\frac{y}{5} + \frac{4}{5} = x$	A1	oe
5	$(\sqrt{3} + 1)(\sqrt{3} + 1)$ $= \sqrt{3}\sqrt{3} + \sqrt{3} + \sqrt{3} + 1$ $= 3 + \sqrt{3} + \sqrt{3} + 1$ $= 4 + 2\sqrt{3}$	M1 A1	Attempt to expand the brackets with at least four terms. Allow one error.