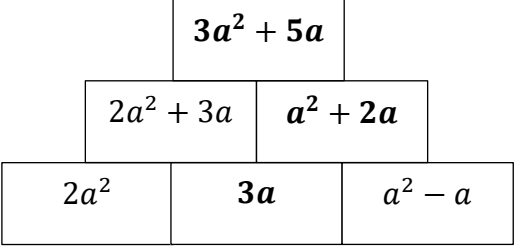


# Algebra: Quadratics, Rearranging Formulae and Identities

## Calculator 20 minute test 4

Q	Answer	Mark	Comments
1	$x^2 - 7x - 8x + 56$	M1	Allow one error, must have 4 terms
	$x^2 - 15x + 56$	A1	
2	$(x + 13)(x - 13)$	B1	
3	$(x \pm 20)(x \pm 1)$	M1	
	$(x - 20)(x - 1)$	A1	
4(a)	$a^{30}$	B1	
4(b)	$a^{24}$	B1	
4(c)	$a^{27}b^6$	B1	
5	$\left(3 - \frac{1}{2}\right)^2$	M1	Attempt is made to substitute $x = -\frac{1}{2}$
	their $2.5^2$	M1	Attempt is made to square their expression
	$\frac{25}{4}$	A1	M2A0 for 6.25. Must be a fraction.
6	+5	B1	Or uses words
	$\times 2$	B1	Or uses words
7	$180 \times (24 - 2) \div 24$	M1	Attempts to substitute into the formula
	165	A1	
8	$(\sqrt{h - 5})^2 = g^2$	M1	Squares both sides
	$h = g^2 + 5$	A1	

Q	Answer	Mark	Comments
9	$3a$ <p><i>their</i> <math>3a + a^2 - a = a^2 + 2a</math></p>	B1 M1	
	$3a^2 + 5a = a(3a + 5)$	A1	