1	(a)		Shown	M1	for method to establish at least one root between $x = 0$ and $x = 1$, eg f(0) = − 5 and f(1) = 3	
				C1	for correct values and a deduction about the roots eg as there is a sign change there must be at least one root between $x = 0$ and $x = 1$ (as f is continuous)	
	(b)		Shown	C1	for a correct first step in rearrangement, eg $x(x^2 + 7) - 5 = 0$ or $x^3 + 7x = 5$	
				C1	for clear and correct steps showing complete rearrangement	
	(c)	$x_1 = 0.625$ $x_2 = 0.6765327696$ $x_3 = 0.6704483001$	0.6704(483001)	M1	for substitution of 1 into the formula (to get 0.625)	
				M1	for substitution of "$x_1 = 0.625$" and "$x_2 = 0.6765327696$" to give x_2 and x_3	
				A1	0.6704(483001)	
	(d)		Comment	M1	substitutes answer to (c) into expression (to get −0.00549...)	
				C1	appropriate comment, eg accurate as answer is close to 0	

2	(a)	6 or −6	M1	for $12^2 + 2 \times -3 \times 18 \, (= 36)$	Terms may be partially evaluated.
			A1	for 6 or −6, accept ±6	Only one value is required for full marks
	(b)	$s = \dfrac{v^2 - u^2}{2a}$	M1	for subtracting u^2 from both sides or dividing all terms by $2a$ as the first step	Must see this step carried out, not just the intention shown
			A1	$s = \dfrac{v^2 - u^2}{2a}$ oe	

3		6	M1	for $720 \div 40 \,(= 18)$ **or** $720 \div 30 \,(= 24)$	
			M1	for a complete process eg $(720 \div 30) - (720 \div 40)$ **or** "18" × 4/3 − "18" **or** "24" − "24" × 3/4	
			A1	cao	