12 (a)	eg $\frac{3(3x+2)-5(2x+1)}{15}(=x)$ oe eg $\frac{1-x}{15}(=x)$ or $\frac{3(3x+2)}{15}-\frac{5(2x+1)}{15}(=x)$ or $3(3x + 2) - 5(2x + 1) = x \times 5 \times 3$ oe or $\frac{3}{5}x+\frac{2}{5}-\frac{2}{3}x-\frac{1}{3}(=x)$		3	M1	Writing fractions over a common denominator or removing denominator or writing each term separately – if student has expanded/multiplied at this stage, then allow one of the 4 terms on the LHS incorrect. If the student has removed the denominator at this stage then a correct method must be shown or implied
	eg $9x+6-10x-5=15x$ oe **or** $1-x=15x$ oe eg $9x + 6 = 15x + 10x + 5$ **or** $\frac{-x+1}{15}=\frac{15x}{15}$ **or** $-\frac{16}{15}x=-\frac{1}{15}$			M1	An equation with no brackets or fractions **or** an equation with a common denominator for all terms with numerators simplified (allow one error for the 4 terms on the LHS only (they may have moved these to the RHS) across the 2 M marks and ft for simplifying)
	Working required	$\frac{1}{16}$		A1	oe 0.0625 (allow 0.062 or 0.063) dep on M1

(b)	$f^2 = \frac{a+bc}{c-d}$		4	M1	for squaring both sides in a correct equation
	eg $cf^2 - df^2 = a + bc$			M1	for multiplying by the denominator and expanding in a correct equation
	eg $cf^2 - bc = a + df^2$			M1	for isolating terms in c on one side and other terms the other in a correct equation
	Correct answer scores full marks (unless from obvious incorrect working)	$c = \frac{a+df^2}{f^2-b}$		A1	oe eg $c = \frac{-a-df^2}{b-f^2}$
					Total 7 marks