12	a		$4e^5f^3$	2	B2	(B1 for 2 out of 3 terms correct in a 3 term product)
	b	E.g. $\frac{3(2x+1)+4(x-2)}{12}$ or $\frac{3(2x+1)}{12}+\frac{4(x-2)}{12}$		3	M1	for expressing both fractions correctly with a common denominator. Allow as two separate fractions.
		E.g. $\frac{6x+3+4x-8}{12}$			M1	for removing brackets correctly in a correct single fraction
			$\frac{10x-5}{12}$		A1	accept $\frac{5(2x-1)}{12}$

c	$\left(4^{k+3}=\right)\left(2^2\right)^{k+3}$ oe **or** $\left(16=\right)2^4$ $\left(16=\right)4^2$ **or** $\left(2^k=\right)\left(4^{\frac{1}{2}}\right)^k$ oe $\left(4^{k+3}=\right)\left(16^{\frac{1}{4}}\right)^{k+3}$ oe **or** $\left(2^k=\right)\left(16^{\frac{1}{4}}\right)^k$ oe		4	M1 for $\left(2^2\right)^{k+3}$ oe **or** 2^4 **or** 4^2 **or** $\left(4^{\frac{1}{2}}\right)^k$ oe **or** $\left(16^{\frac{1}{4}}\right)^{k+3}$ oe **or** $\left(16^{\frac{1}{4}}\right)^k$ oe
	$\left(4^{k+3}=\right)\left(2^2\right)^{k+3}$ oe **and** $\left(16=\right)2^4$ $\left(16=\right)4^2$ **and** $\left(2^k=\right)\left(4^{\frac{1}{2}}\right)^k$ oe $\left(4^{k+3}=\right)\left(16^{\frac{1}{4}}\right)^{k+3}$ oe **and** $\left(2^k=\right)\left(16^{\frac{1}{4}}\right)^k$ oe			M1 for $\left(2^2\right)^{k+3}$ oe **and** 2^4 **or** 4^2 **and** $\left(4^{\frac{1}{2}}\right)^k$ oe **or** $\left(16^{\frac{1}{4}}\right)^{k+3}$ oe **and** $\left(16^{\frac{1}{4}}\right)^k$ oe
	E.g. $2k + 6 = 4 + k$ **or** $k+3=2+\frac{1}{2}k$ **or** $\frac{1}{2}(k+3)=1+\frac{1}{4}k$			M1 for a correct linear equation in k
		−2		A1 dep on at least M2
				Total 9 marks