

1	(a)	$x^{15}$	B1	cao	Where $a \geq 1$ and $b \geq 1$
	(b)	$40 - 10x$	M1	for method to expand one bracket or collect like terms. eg $4 \times x + 4 \times 3 (= 4x + 12)$ or $7 \times 4 - 7 \times 2x (= 28 - 14x)$ or $4 \times x - 7 \times 2x (= 4x - 14x)$ and $4 \times 3 + 7 \times 4 (= 12 + 28)$	
	(c)	$3x^2(5x + y)$	M1	for $3(5x^3 + x^2y)$ or $x(15x^2 + 3xy)$ or $3x(5x^2 + xy)$ or $x^2(15x + 3y)$ or $3x^2(ax + by)$	
			A1	oe	
			A1	cao	

2	16	M1	for simplifying using a correct rule of indices as a first step eg $4^{9-6} (= 4^3 \text{ oe})$ or $4^{-6-1} (= 4^{-7} \text{ oe})$ or $4^{9-1} (= 4^8 \text{ oe})$  or $\frac{4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4}{4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4}$  or $4^2$	
		A1	cao	