1	(a)		6	B1	cao
	(b)		5	B1	cao
	(c)		Shown	M1	for writing 100^a or 1000^b as a power of 10 ($=10^{2a}$ or 10^{3b}) or 10^{2a+3b} or $100 = 10^2$ and $1000 = 10^3$
				C1	for complete chain of reasoning leading to conclusion

2	(a)	m^7	B1	cao	
	(b)	$125n^3p^9$	B2	cao	Allow multiplication signs
			(B1	for 2 of 3 terms correct in a single product)	$125n^3p^x$ or $125n^xp^9$ where $x \neq 0$ or an^3p^9 where a is a number
	(c)	$8q^6r^3$	B2	cao	Allow multiplication signs
			(B1	for 2 of 3 terms correct in a single product)	$8q^6r^x$ or $8q^xr^3$ where $x \neq 0$ or aq^6r^3 where a is a number

3	9	M1	for a correct first step, using the laws of indices to simplify eg 3^2 or. 3^{7+-2} or 3^{7-3} or 3^{-2-3} OR for using exact values, eg. $2187 \times \frac{1}{9}$ (= 243) or $2187 \div 27$ (= 81) or $\frac{1}{27\times9}$ $(=\frac{1}{243})$	
		A1	cao	

4	(a)	n^8	B1	cao	
	(b)	cd^3	M1	for partial simplification, eg c or d^3	May be seen as simplification in original fraction
			A1	for cd^3	Accept c^1d^3
	(c)	$x > \frac{14}{5}$	M1	for $5x > 14$ or $5x = 14$ or critical value, $\frac{14}{5}$ oe	Must see carried out correctly, ie at least $5x > 7 \times 2$ not just intention seen. Allow other signs for this mark.
			A1	$x > \frac{14}{5}$ or $x > 2\frac{4}{5}$ or $x > 2.8$	

5	(a)	c^3	B1	cao	
	(b)	d^{12}	B1	cao	