

Q	Marking instructions	AO	Marks	Typical solution
12(a)	Writes 22	1.1b	B1	22
	Subtotal		1	

Q	Marking instructions	AO	Marks	Typical solution
12(b)	Sets up correct factorial expressions as part of a division or multiplication	3.1a	M1	$\frac{40!}{18!22!} \div \frac{40!}{17!23!} = \frac{40!}{18!22!} \times \frac{17!23!}{40!}$ $= \frac{17!23!}{18!22!}$ $= \frac{23}{18}$
	Completes a reasoned argument to obtain $\frac{23}{18}$	1.1b	R1	
	Subtotal		2	

	Question 12 Total		3	
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