

4	(a)	$4! = 24$ and $4^4 = 256$ or $4! = 4 \times 3 \times 2 \times 1$ and $4^4 = 4 \times 4 \times 4 \times 4$  So $4! < 4^4$	<b>M1</b>   <b>E1</b> <b>[2]</b>	<b>2.1</b>   <b>2.2a</b>	Evaluating both expressions or clearly comparing the factors of each  Clear conclusion seen	
4	(b)	Using counterexample $n = 1$ $1! = 1^1 = 1$  So the statement is false / Nina is incorrect	<b>M1</b>   <b>E1</b> <b>[2]</b>	<b>2.1</b>   <b>2.2a</b>	Attempt to find a counterexample  Clear argument about the statement from $n = 1$	