Ammonia is synthesised according to the following reaction.	Marks 3
$N_2(g) + 3H_2(g)$ $\rightleftharpoons$ $2NH_3(g)$	
At 500 °C this reaction has a $K_c$ of $6.0 \times 10^{-2}$ . $\Delta H^\circ$ for this reaction is $-92$ kJ mol <sup>-1</sup> . Calculate the value of $K_c$ at 200 °C.	
Answer:	