

EXAMPLE Kc CALCULATIONS - HOMOGENOUS

1. Methanol can be manufactured using the following process.

$$CO_{(g)} + 2H_{2(g)}$$
 $CH_3OH_{(g)}$ $\Delta H = -94 \text{ kJmol}^{-1}$

- 0.242 moles of CO were mixed with 0.360 moles of H₂ in sealed container with a volume of 400cm³ at a temperature of 550K and left to reach equilibrium.
- a) It was found that 0.100 moles of CH₃OH was present at equilibrium.

Calculate K_c, including its units.

What would happen to value of K_c, if the temperature was decreased?