Corrected answer for Industrial Chemistry Option, Question 30 (b)

(b) (ii) (1 mark)
Outcomes Assessed: H10
Targeted Performance Bands: 3-4

Criteria	Marks
• Calculates the equilibrium constant	1

Sample Answer

Since the vessel has a 10L volume, the moles (from the graph) should be divided by 10. Hence the equilibrium constant is:

$$K = \frac{[0.04]}{[0.2][0.16]^2} = 7.8$$