

Question	Marking Guidance	Mark	Comments
01.1	<p>M1 $(K_c =) \frac{[\text{CH}_3\text{CH}_2\text{OH}]}{[\text{CH}_2=\text{CH}_2][\text{H}_2\text{O}]}$</p> <p>M2 $\text{mol}^{-1} \text{dm}^3$</p>	<p>1</p> <p>1</p>	<p>M1 penalise missing brackets or use of (); allow correct molecular formulae in correct expression (and allow CH_2CH_2); ignore powers shown as 1</p> <p>M2 units must be in simplest form on one line (or $\text{dm}^3 \text{mol}^{-1}$)</p> <p>M2 units are consequential on expression in M1 ($\text{mol}^{-1} \text{dm}^3$ only scores if it is the units for the expression in M1)</p>
01.2	<p>M1 $\frac{\left[\frac{4.40}{2.00}\right]}{\left[\frac{0.70}{2.00}\right] \times \left[\frac{1.20}{2.00}\right]}$ or $\frac{2.20}{0.35 \times 0.60}$ or $\frac{4.40}{0.70 \times 1.20} \times 2.00$</p> <p>M2 10.5 (must be 3sf)</p>	<p>1</p> <p>1</p>	<p>10.5 (3sf) scores both marks;</p> <p>correct value to 2sf (10) or 4sf or more (10.476...) scores 1 mark</p> <p>Volume not used is CE=0</p> <p>If use incorrect expression for K_c in 1.2 then no marks in 1.2</p> <p>If a value from the question is copied incorrectly into the expression, could still score M2 if then used correctly in calculation (AE -1)</p> <p>Ignore units</p>