Ques 1.

(a) ε-δ definition of a continous fn.

'f' is a continous function at c (+0.25) iff for every $\varepsilon > 0$ (+0.25), $\exists$ a $\delta_\varepsilon > 0$ (+0.25) ($\delta(\varepsilon) = \delta$) (depending on $\varepsilon > 0$) such that $0 < |x - c| < \delta(\varepsilon)$ (+0.5) implies $|f(x) - f(c)| < \varepsilon$. (+0.5)

0.25 → writing defn. in correct order (with properly defined symbols)

(b) 0.5 → correct example

0.5 → explanation