Please help explain with detailed steps/description the following....

If needed: T=25°C

R= 1.99 cal mol^-1 deg^-1

Faraday’s Constant= 23,062 cal volt^-1 equiv ^-1

Question:

Blood contains 0.1 M Cl-. Brain tissue contains about 0.02 M Cl-.

Calculate: (1) the G for the transport of Cl- from blood into brain cells

And (2) the energy expended by brain cells in transporting Cl- outward against the concentration gradient. Assume a membrane potential of -75mV (inside).

Please respond showing each step so I can understand the pathway. Thank you!