Kittel sstate	
6.3. The Fermi-Dirac distribution B given by $\frac{1}{(2)} = \frac{1}{\exp[(2-\mu)/4] + 1}$	7
exp[(2-n)/4]+1	
where μ is only dependent on $7=195T$, not on E .	
For conservation of fermion # ne impose.	
For conservation of fermion #, we impose. $\int_{-\infty}^{\infty} D(\varepsilon) f(\varepsilon) d\varepsilon = n = \frac{N}{L^2},$	
Then $\int_{0}^{\infty} \frac{m}{\pi h^{2}} f(\varepsilon) d\varepsilon = n$	
$\int_{0}^{\infty} f(\varepsilon) d\varepsilon = \frac{h\pi h^{2}}{m}.$	
Chosevie that $f(\xi) = \frac{1}{\exp[(\xi-\mu)/2] + 1} = \frac{\exp[(\mu-\xi)/2]}{\exp[(\xi-\mu)/2] + 1}$	1
It's then clear that $f(z) = J + 7 \ln \left[\frac{\exp[c_{\mu} - \epsilon)}{7} + 1 \right]$	
$\Rightarrow \int_{0}^{\infty} f(\xi) d\xi = - \eta \int_{0}^{\infty} \exp[(\mu - \xi)/\eta] + 1 \int_{0}^{\infty} \infty $	1
= 7/ngexp[(n-e)/7]+1}	

$$= 7 \ln \left\{ e_{\gamma} \right\} \left[\frac{1}{1} \right] + 1 \right\}$$

$$= 7 \ln \left\{ e_{\gamma} \right\} \left[\frac{n \pi h^{2}}{m} \right] - 1 \right\}$$

$$= 7 \ln \left\{ e_{\gamma} \right\} \left[\frac{n \pi h^{2}}{m} \right] - 1 \right\}$$

Pandon (ten