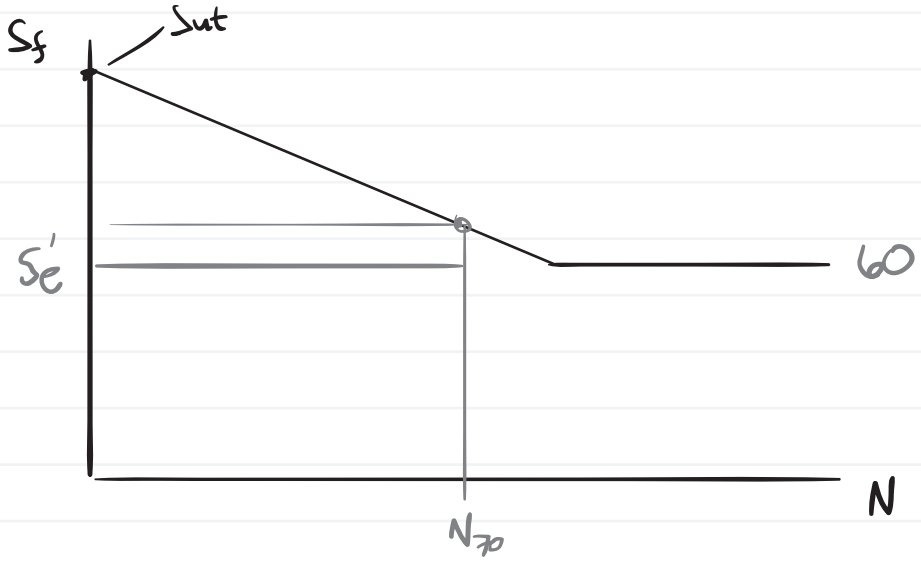
6-3

$\sigma_{rev} = 70$ kpsi $N = ?$

$S_{ut} = 120$ kpsi

$S_e' = 0.5\, S_{ut} = 0.5(120) = 60$ kpsi



6-16: $N_{70} = \left(\frac{\sigma_{rev}}{a}\right)^{1/b}$ $f = 0.82$

$a = \frac{(f S_{ut})^2}{S_e'} = 161.376$

$b = -\frac{1}{3}\log\left(\frac{f S_{ut}}{S_e'}\right) = -0.0716$

$N_{70} = \frac{1.16 \cdot 10^5}{3}$