5/a) $Voltage\ regulation = \frac{VA_{RATING}}{V_1{}^2}(R_P'\cos\emptyset + X_P'\sin\emptyset)\ x\ 100\ \%$

$Voltage\ regulation = \frac{200\ x\ 10^3}{415^2}\ x\ (0.014x0.8 + 0.057x\ \sqrt{1-0.8^2})\ x\ 100\ \% = 5.272\ \%$

b) $Voltage\ regulation = \frac{VA_{RATING}}{V_1{}^2}R_P'x\ 100\ \%$

$Voltage\ regulation = \frac{200\ x\ 10^3}{415^2}\ x\ 10\ x\ 10^{-3}x\ 100\ \% = 1.16\ \%$

$I_1 = \frac{200\ x\ 10^3}{415} = 481.93\ A$ $I_2 = \frac{200\ x\ 10^3}{11\ x\ 10^3} = 18181818.18\ A$