

(\*Pl(mu,2)\*)

n = 2;

L = Table[li, {li, {1.0, 0.6, 0.3}}] \*

Table[ $\frac{n!}{i! (n-i)!}$ , {i, {0, 1, 2}}] \* Table[ $\frac{(\mu/\mu_0)^i}{(1 + \mu/\mu_0)^n}$ , {i, {0, 1, 2}}]

{ $\frac{1.}{\left(1 + \frac{\mu}{\mu_0}\right)^2}$ ,  $\frac{1.2 \mu}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0}$ ,  $\frac{0.3 \mu^2}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0^2}$ }

Lsim = FullSimplify[ $\frac{1}{\left(1 + \frac{\mu}{\mu_0}\right)^2} + \frac{1.2 \mu}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0} + \frac{0.3 \mu^2}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0^2}$ ]

$\frac{0.3 \mu^2 + 1.2 \mu \mu_0 + 1. \mu_0^2}{(\mu + \mu_0)^2}$

Ym = Table[ymi, {ymi, {0, 0.04, 0.2}}] \*

Table[ $\frac{n!}{i! (n-i)!}$ , {i, {0, 1, 2}}] \* Table[ $\frac{(\mu/\mu_0)^i}{(1 + \mu/\mu_0)^n}$ , {i, {0, 1, 2}}]

{0,  $\frac{0.08 \mu}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0}$ ,  $\frac{0.2 \mu^2}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0^2}$ }

Ymsim = FullSimplify[ $\frac{0.08 \mu}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0} + \frac{0.2 \mu^2}{\left(1 + \frac{\mu}{\mu_0}\right)^2 \mu_0^2}$ ]

$\frac{\mu (0.2 \mu + 0.08 \mu_0)}{(\mu + \mu_0)^2}$

(\* Pl = L/(Ym+km) \*)

Plmu2 = FullSimplify[ $\left(\frac{0.3 \mu^2 + 1.2 \mu \mu_0 + 1 \mu_0^2}{(\mu + \mu_0)^2}\right) / \left(0.5 + \frac{\mu (0.2 \mu + 0.08 \mu_0)}{(\mu + \mu_0)^2}\right)$ ]

2. +  $\frac{\mu (-1.57143 \mu - 1.37143 \mu_0)}{1. \mu^2 + 1.54286 \mu \mu_0 + 0.714286 \mu_0^2}$