$$j_{1,\,out,\,x,\,R} - j_{1,\,inc,\,x,\,R} = -\frac{20\,\bar{\Phi}_0}{Deltax} + \frac{896\,j_{1,\,out,\,x,\,R}}{25\,Deltax} + \frac{896\,j_{1,\,inc,\,x,\,R}}{25\,Deltax} + \frac{128\,j_{3,\,out,\,x,\,R}}{5\,Deltax} + \frac{128\,j_{3,\,inc,\,x,\,R}}{5\,Deltax}$$
$$+ \frac{224\,j_{1,\,out,\,x,\,L}}{25\,Deltax} + \frac{224\,j_{1,\,inc,\,x,\,L}}{25\,Deltax} + \frac{32\,j_{3,\,out,\,x,\,L}}{5\,Deltax} + \frac{32\,j_{3,\,inc,\,x,\,L}}{5\,Deltax} - \frac{60\,\bar{\Phi}_{0,\,x,\,1}}{Deltax} - \frac{140\,\bar{\Phi}_{0,\,x,\,2}}{Deltax}$$

$$j_{1,\,out,\,x,\,L} - j_{1,\,inc,\,x,\,L} = \frac{20\,\bar{\Phi}_0}{Deltax} - \frac{224\,j_{1,\,out,\,x,\,R}}{25\,Deltax} - \frac{224\,j_{1,\,inc,\,x,\,R}}{25\,Deltax} - \frac{32\,j_{3,\,out,\,x,\,R}}{5\,Deltax} - \frac{32\,j_{3,\,inc,\,x,\,R}}{5\,Deltax}$$
$$- \frac{896\,j_{1,\,out,\,x,\,L}}{25\,Deltax} - \frac{896\,j_{1,\,inc,\,x,\,L}}{25\,Deltax} - \frac{128\,j_{3,\,out,\,x,\,L}}{5\,Deltax} - \frac{128\,j_{3,\,inc,\,x,\,L}}{5\,Deltax} - \frac{60\,\bar{\Phi}_{0,\,x,\,1}}{Deltax} + \frac{140\,\bar{\Phi}_{0,\,x,\,2}}{Deltax}$$

$$j_{3,\,out,\,x,\,R} - j_{3,\,inc,\,x,\,R} = \frac{368\,j_{1,\,out,\,x,\,R}}{25\,Deltax} + \frac{368\,j_{1,\,inc,\,x,\,R}}{25\,Deltax} + \frac{472\,j_{3,\,out,\,x,\,R}}{15\,Deltax} + \frac{472\,j_{3,\,inc,\,x,\,R}}{15\,Deltax}$$
$$- \frac{208\,j_{1,\,out,\,x,\,L}}{25\,Deltax} - \frac{208\,j_{1,\,inc,\,x,\,L}}{25\,Deltax} + \frac{56\,j_{3,\,out,\,x,\,L}}{5\,Deltax} + \frac{56\,j_{3,\,inc,\,x,\,L}}{5\,Deltax} - \frac{20\,\bar{\phi}_2}{Deltax} - \frac{60\,\bar{\phi}_{2,\,x,\,1}}{Deltax}$$
$$- \frac{140\,\bar{\phi}_{2,\,x,\,2}}{Deltax}$$

$$j_{3,\,out,\,x,\,L} - j_{3,\,inc,\,x,\,L} = \frac{208\,j_{1,\,out,\,x,\,R}}{25\,Deltax} + \frac{208\,j_{1,\,inc,\,x,\,R}}{25\,Deltax} - \frac{56\,j_{3,\,out,\,x,\,R}}{5\,Deltax} - \frac{56\,j_{3,\,inc,\,x,\,R}}{5\,Deltax}$$
$$- \frac{368\,j_{1,\,out,\,x,\,L}}{25\,Deltax} - \frac{368\,j_{1,\,inc,\,x,\,L}}{25\,Deltax} - \frac{472\,j_{3,\,out,\,x,\,L}}{15\,Deltax} - \frac{472\,j_{3,\,inc,\,x,\,L}}{15\,Deltax} + \frac{20\,\bar{\phi}_2}{Deltax} - \frac{60\,\bar{\phi}_{2,\,x,\,1}}{Deltax}$$
$$+ \frac{140\,\bar{\phi}_{2,\,x,\,2}}{Deltax}$$