

$$\frac{Y}{X} = \frac{0.7(z-1)^2}{(z-.7311)(z+.2)}$$

$$\frac{z-1}{z-1} \quad \frac{z-1}{z-1}$$

$$\frac{z-.7411}{z+.2}$$

$$\begin{array}{r} +2z - .140 \\ z^2 - .74z \\ \hline z^2 - .54z - .140 \end{array}$$

$$\frac{0.7(z^2 - 2z + 1)}{z^2 - .54z - .140}$$

$$\begin{array}{r} \times \frac{1}{z^2} \\ \frac{1}{z^2} 0.7(1 - 2z^{-1} + z^{-2}) \\ \hline 1 - .54z^{-1} - .140z^{-2} \end{array}$$

$$Y(1 - .54z^{-1} - .140z^{-2}) = X 0.7(1 - 2z^{-1} + z^{-2})$$

$$Yz = X 0.7(1 - 2z^{-1} + z^{-2}) + .54Yz^{-1} + .140Yz^{-2}$$

$$\begin{aligned} Y &= 0.7X - 1.4X(k-1) + 0.7X(k-2) \\ &\quad + .54Y(k-1) + .140Y(k-2) \end{aligned}$$