\[ m(x) = \frac{x+1}{\sqrt{x^2-2}} \]

\[ n(x) = \frac{(2x+1)(x-2)}{(x+3)(x-1)} \]

\[ q(x) = \frac{1}{x^2+1} \]

\[ r(x) = \frac{x}{x^2-1} \]