Solution (#690) Column-reducing we obtain

$$\left(\frac{A}{B}\right) = \begin{pmatrix} 1 & 3 \\ 2 & 6 \\ \hline 1 & 7 \\ 2 & 3 \end{pmatrix} \longrightarrow \begin{pmatrix} 3/11 & 4/11 \\ 6/11 & 8/11 \\ \hline 1 & 0 \\ 0 & 1 \end{pmatrix}.$$

$$\left(\frac{C}{D}\right) = \begin{pmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \\ \hline 1 & 0 & 2 \\ 1 & 2 & 3 \\ 1 & 6 & 2 \end{pmatrix} \longrightarrow \begin{pmatrix} 0 & 1 & 0 \\ 3/2 & 0 & 1/2 \\ 3 & -1 & 1 \\ \hline 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}.$$

And recall the effect of each ECO is the same as postmultiplying by some elementary matrix.