

EE610
10/16/00 r.g

$$(3, 4) \text{ entry} = (-1)^{3+4} \times (4, 3)_{\text{minor}}$$

$$= -1 \cdot \begin{vmatrix} a & -1 & 0 \\ d_0 & a+d_1 & 0 \\ 0 & 0 & -1 \end{vmatrix} = a^2 + d_1 a + d_0$$

$$(4, 4) = \begin{vmatrix} a & -1 & 0 \\ d_0 & a+d_1 & -1 \\ 0 & 0 & a \end{vmatrix} = a(a^2 + d_1 a + d_0)$$

$$d(a) = a^2 + d_1 a + d_0$$

$$T(a) = [r_1, r_2, r_3, r_4] \begin{bmatrix} 1 \\ a \\ d(a) \\ a \cdot d(a) \end{bmatrix} \times \frac{1}{d(a)^2}$$

by choice of r_i 's get a desired numerator through degree 3.

Note: if 1 is not in the 2, 3 position but there a 0, then all nonzero numerators contain $d(a)$