2.7 (10 points) Challenge problem. By any means at your disposal, find the rotation matrix $D_{M'J}^M(R) = \langle JM'|R|JM \rangle$, for an arbitrary rotation $R$, in terms of the corresponding spin-$\frac{1}{2}$ rotation matrix, $D_{\epsilon'\epsilon}^{(1/2)}(R) = \langle \frac{1}{2}, \frac{1}{2}\epsilon'|R|\frac{1}{2}, \frac{1}{2}\epsilon \rangle$. 