Problem Set #7
Due on Friday, 7 March, 2008.

1. Exercise 2E.3 *[5]*

2. Exercise 2E.5 *[5]*

Note: In solving both exercises, you may assume, if you find it useful to do so, that earlier exercises in the text are true.

I sit here and sit here, sit, sit, sit
I waiting, you see, for inspiration to hit.
I've got a T from U to V
And must find $\mathbf{A}_T$ using bases $\mathcal{A}$ and $\mathcal{B}$.
But hard as I try I just can't get it right,
Do I go up and down or left and right?
Wait a minute, I see the problem now
Professor O'Brien has forgot something somehow.
He said that in U I have $ax^2 + bx + c$
But in V he only gave me $[d, e]$.
So matrix $\mathbf{A}$ cannot be got
So matrix $\mathbf{A}_T$ can be forgot.
Thank God that the answer cannot be sought,
But I wonder what the answer to #4 be ought!

By Kay Finner, from her MA 130 final examination in 1995.