Math Finance, ACC Worksheet, Winter 2006
Due Wednesday, March 1, 2006

Interpret each statement as a mathematical expression.

1. $\tilde{\phi}_t$ replicates U_t

2. $(1+r)^{-1}\mathbf{E}^*\left[U_t \mid \mathcal{F}_{t-1}\right]$ is the money needed at time $t-1$ to replicate U_t.

3. $\tilde{\delta}_t$ is the excess money needed at time $t-1$ to cover the cost of immediate exercise of the ACC above what is required for exercise at a future time

4. U_t is the money needed at time t to be able to cover the payoff of the ACC at time t or in the future

5. $\tilde{\phi}^*$ is superhedging for U_t