Clicker Questions for November 15
What is the value of
(define thunk (lambda ()
    (begin
        (printf "Hi, Mom!"
        (+ 1 2))))

A. 3
B. "Hi, Mom!"
C. Life is meaningless. There is no value.
D. Definitions don't return values.
Answer D: Definitions don't return values.
Again, (define thunk (lambda ()
    (begin
        (printf "Hi, Mom!"
        (+ 1 2))))

What is the value of (thunk)?
A. The value is 3
B. The value is 3, but it also prints "Hi, Mom!"
C. Life is meaningless, there is no value.
D. A note to Mom is priceless
Answer B: The value is 3, but it also greets Mom.

If we say (define foobar (thunk)) it also prints "Hi, Mom!" but the value of foobar is just 3
Sometimes it is handy to delay the evaluation of an expression until we need it. How can we do that?

A. Put it in a note to Mom.
B. Put it in the body of a lambda expression.
C. Put it in the body of a let expression.
D. Attach a note to it saying "Please don't evaluate this."
Answer B: Put it in the body of a lambda expression. The body won't be evaluated until the lambda expression is *called*. 
So will this work? I want a function \textit{delay} that delays the evaluation of its argument.

\begin{verbatim}
(define delay (lambda (expression) (lambda () expression)))
\end{verbatim}

A. Nope; we need Mom.
B. Nope; functions (including this \textit{delay}) always evaluate their arguments.
C. Sure. We just saw that we can delay evaluation of an expression by putting it in the body of a lambda expression.
D. Sure. Why not?
Answer C: Nope..