

## Homework 9

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1.  $\text{triangle}(0,0).$

$\text{triangle}(N,T) \leftarrow N > 0, N1 = N-1, \text{triangle}(N1,$   
 $T = N+T1).$

2.  $\text{triangle}(N,T) \leftarrow \text{triangle}(N,0,T).$

$\text{triangle}(0,A,A).$

$\text{triangle}(N,A,T) \leftarrow N > 0, M = N-1, B = A+N$   
 $\text{triangle}(M,B,T).$

\* A is  
the iterative  
value

3.  $\text{length}(xs, L) \leftarrow \text{length}(xs, 0, L).$

$\text{length}([], A, A).$

$\text{length}([x:xs], AD, A) \leftarrow A1 = AD+1,$   
 $\text{length}(xs, A1, A).$

\* A is  
a counter