## **A running example of backpropagation**

The full story so far

1. Consider the following sample Neural Network 
2. Steps to implement Backpropagation
   1. Randomly initialise W and b
   2. Forward propagation
      1. **For k = 1 to L-1 do**

ak = bk + Wkhk-1

hk = g(ak)

* + 1. **end**
    2. aL = bL + WLhL-1;
    3. ŷ = O(aL)
  1. Backpropagation
     1. //Compute output gradient
     2. **For k = L to 1 do**

//Compute gradients w.r.t parameters

//Compute gradients w.r.t layer below

/// Compute gradients w.r.t layer below (pre-activation)

* + 1. **end**

1. Sample calculations to be added at a later date. Δyn/Δxn