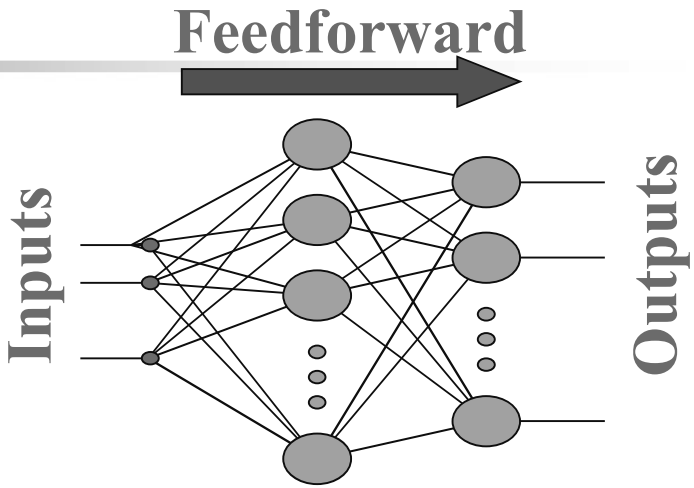

- $v_k(n) = \sum_{j=0}^{q} w_{kj}(n) y_j(n)$
- $\frac{\partial v_k(n)}{\partial y_j(n)} = w_{kj}(n)$
- $\frac{\partial \mathrm{E(n)}}{\partial y_j(n)} = -\sum_k e_k(n) \varphi_k'(v_k(n))\, w_{kj}(n) =$
  $-\sum \delta_k(n) w_{kj}(n)$

- $w_i(n+1) = w_i(n) - \eta \nabla E(w_i)$

$v_j - y_j - v_k - y_k - e_k$