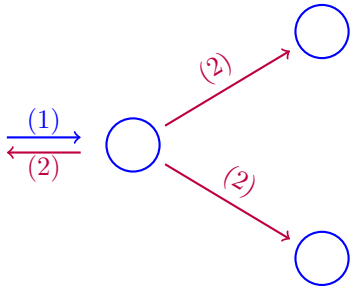


(a) Pessimistic concurrency control  
for  $(R, W, N) = (3, 2, 2)$ .



(b) Optimistic concurrency control  
for  $R = 1$  or  $W = 1$ .