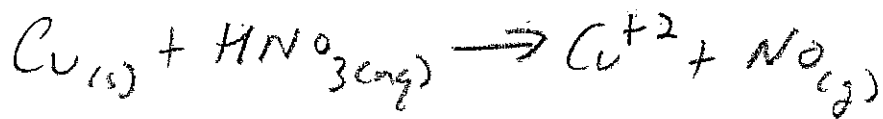
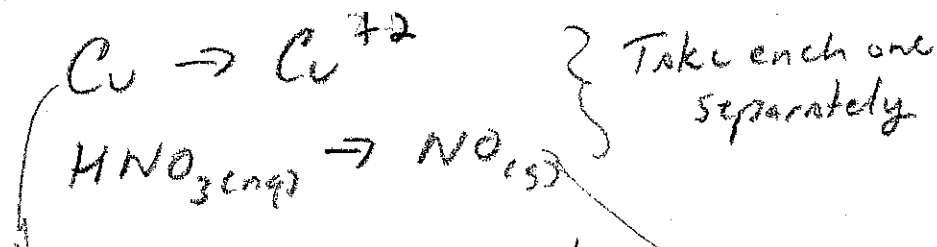


Balancing Redox Reaction by Half-Cell Method

Ex. Balance the following reaction In Acid solution using Half-Cell method



Step 1 (also called step 1+2) Separate into half cell (reactions)

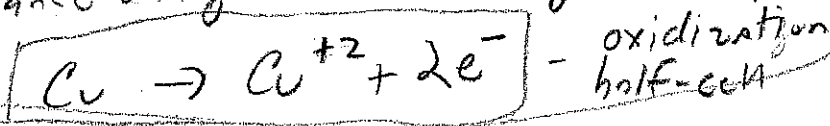


Step 2a (also called step 3) Balance atoms Cu balanced

Step 2b (also called step 4) Balance O w/ H_2O no O

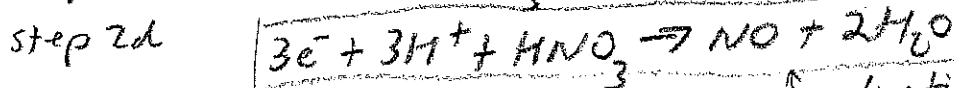
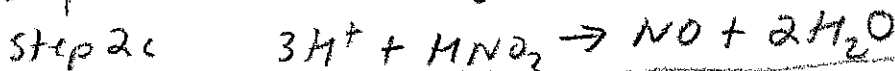
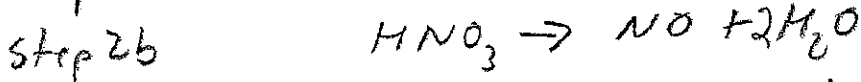
Step 2c (also called step 4) Balance H w/ H^+ no H

Step 2d (also called step 5) Balance charge in half-cell by adding e^-



Repeat for

Step 2a no change



reduction half-cell

Step 3+4

(also called step 6)

Balance

electrons between half-cell

