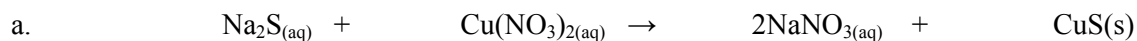


SHOW ALL WORK TO RECEIVE CREDIT.

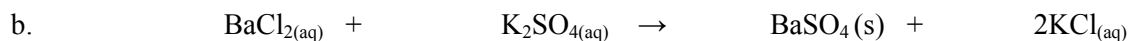
Molar masses: K 39.1; Mn 54.9; O 16.0

1. (16 Pts) Write total ionic and net ionic equations for each of the following reactions. You will have to complete some of the reactions. Also watch for weak acids.



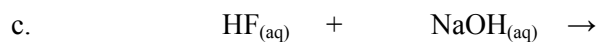
total
ionic eq.

net
ionic eq.



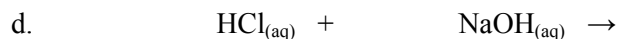
total
ionic eq.

net
ionic eq.



total
ionic eq.

net
ionic eq.



total
ionic eq.

net
ionic eq.

2. (6 Pts) A 0.798 sample g of KMnO_4 was dissolved in water to form 50.0 mL of solution.

a. Determine the molarity of the solution.

b. 10.0 mL of the solution formed in part 2a was taken and diluted to 50.0 mL total volume. Determine the resulting molarity?

3. (3 Pts) Give the formula for one weak acid, one weak base, and one strong base.