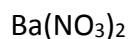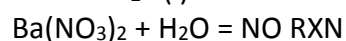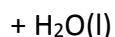# Answer on Question # 63362, Chemistry / General Chemistry

Decide if aqueous solutions of the following are acidic, basic, or neutral. For each, write the balanced equation that determines the pH of the solution. All species should include charge (if any) and phase. On the product side, list the cation (if any) first, followed by the neutral molecule (if any), and the anion (if any). (See Appendix E for K values.)
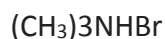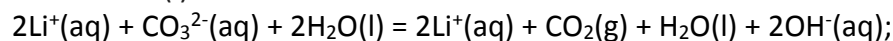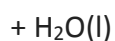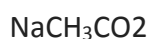
Solution:

$Ba(NO_3)_2$
Solution is: Neutral
+ $H_2O(l)$
$Ba(NO_3)_2 + H_2O$ = NO RXN

Li_2CO_3
Solution is: alkaline
+ $H_2O(l)$
$2Li^+(aq) + CO_3^{2-}(aq) + 2H_2O(l) = 2Li^+(aq) + CO_2(g) + H_2O(l) + 2OH^-(aq)$;

$(CH_3)3NHBr$
Solution is: acidic
+ $H_2O(l)$
$(CH_3)3NH^+(aq) + Br^-(aq) + H_2O(l) = H^+(aq) + (CH_3)3NHOH + Br^-(aq)$

$NaCH_3CO2$
Solution is: alkaline
+ $H_2O(l)$
$Na^+(aq) + CH_3CO^{2-}(aq) + H_2O = Na^+(aq) + CH_3CO2H(aq) + OH^-(aq)$