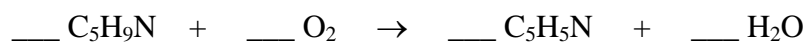


1 (10 points in total). When the following reaction consumes 1.465 moles of C_5H_9N , how many moles of H_2O are produced? What would the concentration of the H_2O be if it were dissolved in 2.1 cubic meters of solvent?



/10

2 (10 points in total for 2a + 2b). For each of the following compounds, write out the equation defining the solubility product for each of these solids in an appropriate solvent.

2a (5 points for this part). **CaBr₂**

2b (5 points for this part). **Al₂(SO₄)₃**

/10

3 (10 points in total). For the following system, calculate the pH of the solution. If 1.26 g of Ca(OH)_2 are dissolved in 52.6 mL of water, what is the pH?

/10
