Challenge 5: Precipitation

When 0.2 mmol of NaF and 10 mmol of $Ca(NO_3)_2$ are combined in 1 L of water, $CaF_2(s)$ precipitates. How much Ca^{2+} and F^- remain in solution. The K_{sp} of CaF_2 is 3.9×10^{-11}.

Answer: $[Ca^{2+}] = 9.9$ mmol, $[F^-] = 0.063$ mmol