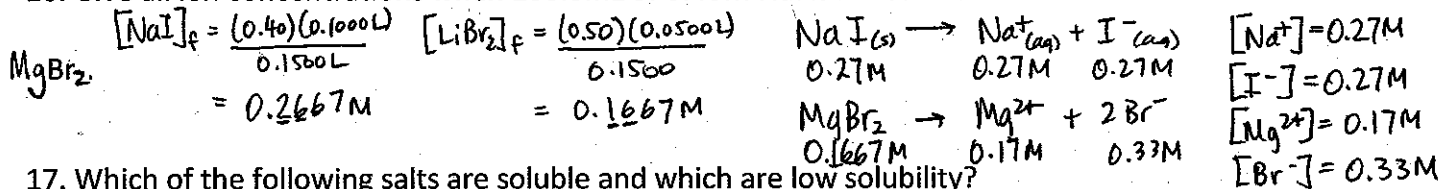




15. Give the molarity of each ion when 1.45g of  $MgCl_2$  is dissolved in 500.0mL of water.

$$\frac{1.45g}{95.3g} \times 1mol = 0.015215mol \quad [MgCl_2] = \frac{0.015215mol}{0.5000L} = 3.04 \times 10^{-2}M$$

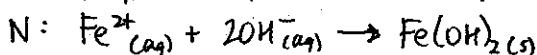
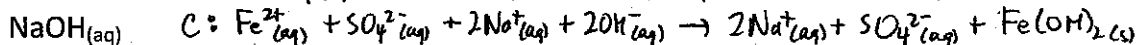
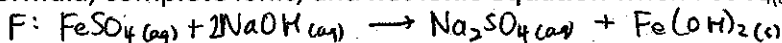
16. Give all ion concentrations when 100.0mL of 0.40M NaI is mixed with 50.0mL of 0.50M



17. Which of the following salts are soluble and which are low solubility?

- a)  $CuCl_2$  (b)  $CuI$  (c)  $Ag_2SO_4$  (d)  $K_2CO_3$  (e)  $Sr(OH)_2$  (f)  $FeS$   
 S            LS            LS            S            S            LS

18. Write a formula, complete ionic, and net ionic equation when  $FeSO_4(aq)$  is mixed with



19. Draw a flowchart to separate a mixture that may or may not contain  $S^{2-}$  and/or  $SO_4^{2-}$ .

