

Homework

$$\begin{aligned}V_i &= ? \\C_i &= 4.00\text{M} \\V_F &= 250.0\text{mL} \\C_F &= 0.760\text{M}\end{aligned}$$

$$\begin{aligned}V_i &< V_F \\C_i &> C_F\end{aligned}$$

$$\begin{aligned}V_i C_i &= V_F C_F \\V_i (4.00\text{M}) &= (250.0\text{mL})(0.760\text{M}) \\V_i &= \frac{(250.0\text{mL})(0.760\text{M})}{4.00\text{M}}\end{aligned}$$

$$V_i = 47.5\text{mL}$$

$$\begin{aligned}\textcircled{21} \quad V_i &= ? \\C_i &= 2.00\text{M} \\V_F &= 100.0\text{mL} \\C_F &= 0.150\text{M}\end{aligned}$$

$$\begin{aligned}V_i C_i &= V_F C_F \\V_i (2.00\text{M}) &= (100.0\text{mL})(0.150\text{M}) \\V_i &= \frac{(100.0\text{mL})(0.150\text{M})}{(2.00\text{M})}\end{aligned}$$

$$V_i = 7.50\text{mL}$$

Dilution Worksheet

1) 0.20 M

2) 0.16 M

3) 0.68 M

4) 0.080 M

5) 62.5 mL

6) 31 mL

7) 6.3 mL

8) 50. mL

9) 100. mL

10) 100. mL

Solutions Test

- Net Ionic Equations
- Solubility
- Concentration
- Dilutions

p. 347 #53-55

p. 499 #42, 44, 45, 48, 51-55