Review Unit 5.1

Write out the dissociation equation and say whether or not this compound conducts electricity or not.

$$
\mathrm{HNO}_{3}(\mathrm{~g}) \rightarrow
$$

$$
\mathrm{NO}_{2}(l) \rightarrow
$$

$$
\mathrm{H}_{2} \mathrm{O}_{2}(l) \rightarrow
$$

$$
\mathrm{H}_{2} \mathrm{SO}_{4}(\mathrm{~g}) \rightarrow
$$

$$
C a(s) \rightarrow
$$

## M1V1 = M2V2

250 mL of 0.07 M KI are added to 175 mL of $\mathrm{H}_{2} \mathrm{O}$. What is the new concentration of KI ?

How many litres are needed of $17.5 \mathrm{M} \mathrm{H}_{2} \mathrm{O}_{2}$ solution to make 8.8 L of a 2.2 M solution?

If 750 mL of $0.02 \mathrm{M} \mathrm{NaBr}_{2}$ is mixed with 175 mL of $0.52 \mathrm{M} \mathrm{NaBr}_{2}$. What is the new concentration of $\mathrm{NaBr}_{2}$ ?

If 650 mL of $0.75 \mathrm{M} \mathrm{FeCl}_{3}$ is mixed with 255 mL of $1.25 \mathrm{M} \mathrm{FeCl}_{3}$. What is the new concentration of $\mathrm{FeCl}_{3}$ ?

