1. Exercise 2.8

   (a) We know that $\overline{g}$ is the average function of many different hypothesis $g_1,\ g_2, ...,\ g_n$ of different data sets. H represents the hypothesis set, where each hypothesis in H is dependent on their respective data set. If the hypothesis in H are in linear combination, then the average of the hypothesis in H should also be a linear combination, proving that $\overline{g} \in H$ ■