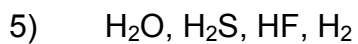
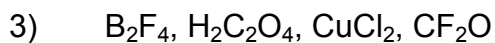
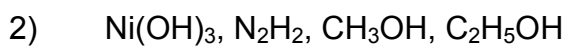


Ranking Molecules by Increasing Polarity

In each of the following problems, rank the molecules from lowest to highest polarity:



Ranking Molecules by Increasing Polarity Solutions

In each of the following problems, rank the molecules from lowest to highest polarity:

- 1) $\text{PF}_3, \text{LiOH}, \text{SF}_2, \text{NF}_3$
 $\text{NF}_3 < \text{PF}_3 < \text{SF}_2 < \text{LiOH}$

- 2) $\text{Ni}(\text{OH})_3, \text{N}_2\text{H}_2, \text{CH}_3\text{OH}, \text{C}_2\text{H}_5\text{OH}$
 $\text{N}_2\text{H}_2 < \text{C}_2\text{H}_5\text{OH} < \text{CH}_3\text{OH} < \text{Ni}(\text{OH})_3$

- 3) $\text{B}_2\text{F}_4, \text{H}_2\text{C}_2\text{O}_4, \text{CuCl}_2, \text{CF}_2\text{O}$
 $\text{B}_2\text{F}_4 < \text{H}_2\text{C}_2\text{O}_4 < \text{CF}_2\text{O} < \text{CuCl}_2$

- 4) $\text{PH}_3, \text{PF}_3, \text{NH}_3, \text{NF}_3$
 $\text{PH}_3 < \text{NH}_3 < \text{NF}_3 < \text{PF}_3$

- 5) $\text{H}_2\text{O}, \text{H}_2\text{S}, \text{HF}, \text{H}_2$
 $\text{H}_2 < \text{H}_2\text{S} < \text{H}_2\text{O} < \text{HF}$