Ex 41 - Nucleophiles/Leaving groups

Principles to remember: Basicity correlates directly with basicity for atoms in the same row of the periodic table with the same charge. In the same column, bigger is more nucleophilic. Good leaving groups make poor nucleophiles, and vice versa, except for Br⁻ and I⁻ which are good at both.

Question One

Rank the following in order of increasing nucleophilicity.

Question Two

H₂O NH₃ PH₃

Rank the following in order of increasing leaving groupness. I.e. worst to best leaving groups.

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