1. Provide the correct number for each of the following: (6 points)
   a.) The number of primary alcohols with the formula \( \text{C}_6\text{H}_{14}\text{O} \). 8
   b.) The number of secondary alcohols with the formula \( \text{C}_6\text{H}_{12}\text{O} \). 3
   c.) The number of primary amines with the formula \( \text{C}_4\text{H}_{11}\text{N} \). 4

2. Circle the compound in each pair which has the higher boiling point. (2 points)
   a.)
   b.)

3. For each of the following neutral compounds, add pi and non-bonded electron pairs and formal charges (if needed) to the structure given, and draw another resonance form showing all bonding and non-bonding electron pairs and formal charges. (4 points)
   a.)
   b.)

4. For each of the following compounds, indicate all types of functional groups present by placing the corresponding letters on the line below the compound. (8 points)
   a.)
   b.)
   g i j
   Aspirin
   a. alcohol
   b. ether
   c. amine
   d. aldehyde
   e. alkene
   f. alkyne
   g. aromatic
   h. amide
   i. carboxylic acid
   j. ester
   k. haloalkane
   l. ketone
   Aspartame (NutraSweet)

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