1. Fill in the product(s) for two of the next three equations. You need not show mechanisms, only the product or products.

a. \( \text{Cl}_2 \) peroxides

b. \( \text{OH} \) \( \text{H}_2\text{SO}_4 \) heat

c. \( \text{Br}_2 \) heat

2. Name the following compounds using IUPAC rules. Include ALL pertinent details to receive full credit.

a. 

b. 

3. What is the product or products of the following reaction (3 pts)? Write out a detailed reaction mechanism, each intermediate, and which accounts for all the products you have shown (8 pts).