1. For each of the following structures or names, give an IUPAC name or draw the correct structure (including all atoms), as required.

(a) 

(b) 4-secbutyl-2,3-diethyl-trans-2-octene

2. For each of the following reactions, fill in the correct product (clearly indicating all atoms around the reacting centers).

(a) 

(b) 

H₂C
  H₂
  H₂
  H

H₂, Pt  →  H₂C
  H₂
  H₂
  H

Br
Br

H₂C
  H₂
  H₂
  H

H₂C
  H₂
  H₂
  H
1. For each of the following structures or names, give an IUPAC name or draw the correct structure (including all atoms), as required.

(a) 2-ethyl-1,3-difluoro cyclopentene

(b) 4-secbutyl-2,3-diethyl-trans-2-octene

2. For each of the following reactions, fill in the correct product (clearly indicating all atoms around the reacting centers).

(a) \[ \text{H}_3\text{C}--\text{C}--\text{C}--\text{C}=\text{CH}_2 \quad \xrightarrow{\text{H}_2, \text{Pt}} \quad \text{H}_3\text{C}--\text{C}--\text{C}=\text{CH}_2 \]

(b) \[ \text{H}_3\text{C}--\text{C}--\text{C}--\text{C}=\text{CH}_2 \quad \xrightarrow{\text{Br}_2} \quad \text{H}_3\text{C}--\text{C}--\text{C}--\text{C}=\text{CH}_2 \]