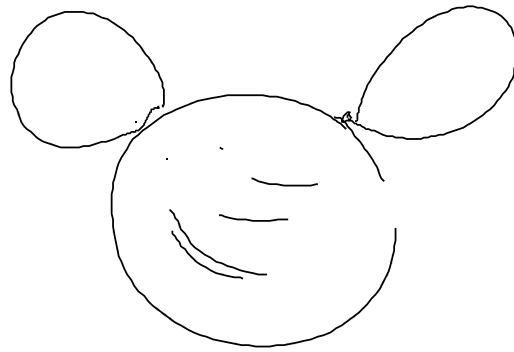
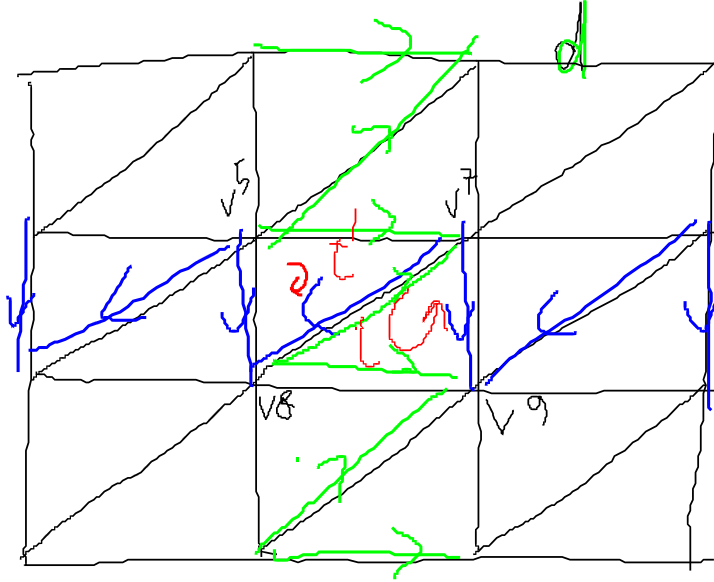


c

$$c \cup d = t^*$$



$H_1 \cong \mathbb{Z}$   
 $H_2 \oplus H_3 \cong \mathbb{Z} \oplus \mathbb{Z}$   
 $H_4 \cong \mathbb{Z}^2$