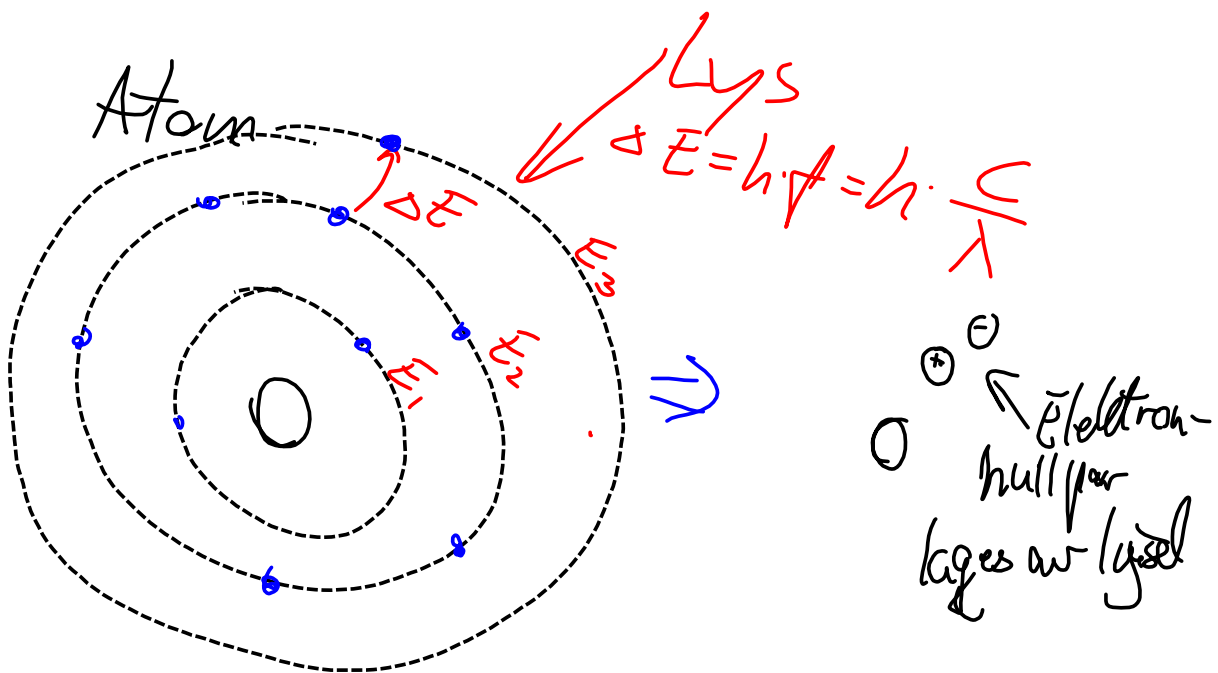
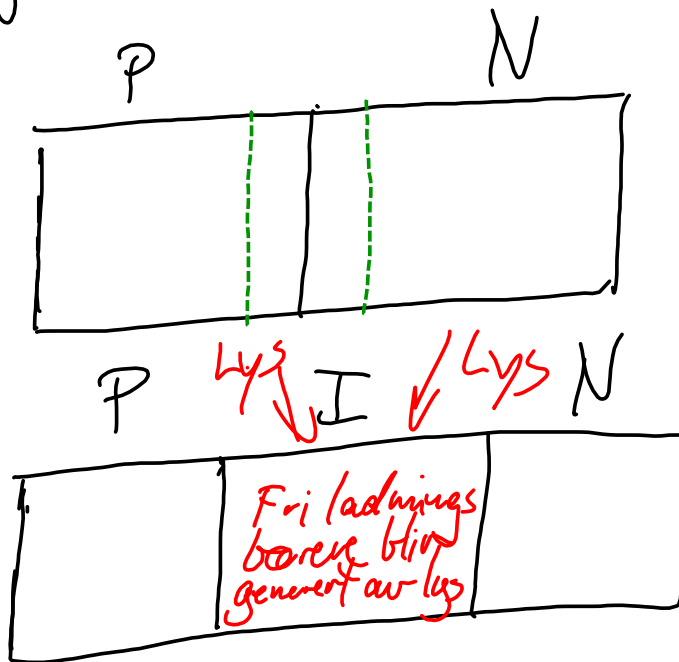
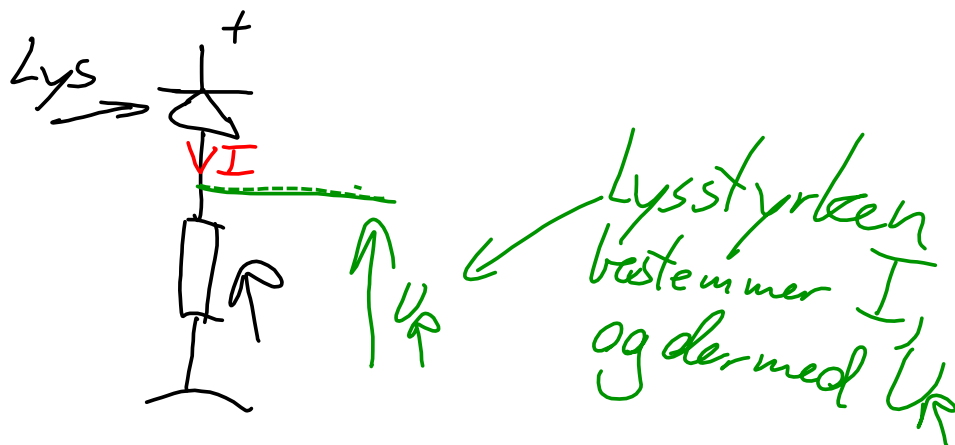


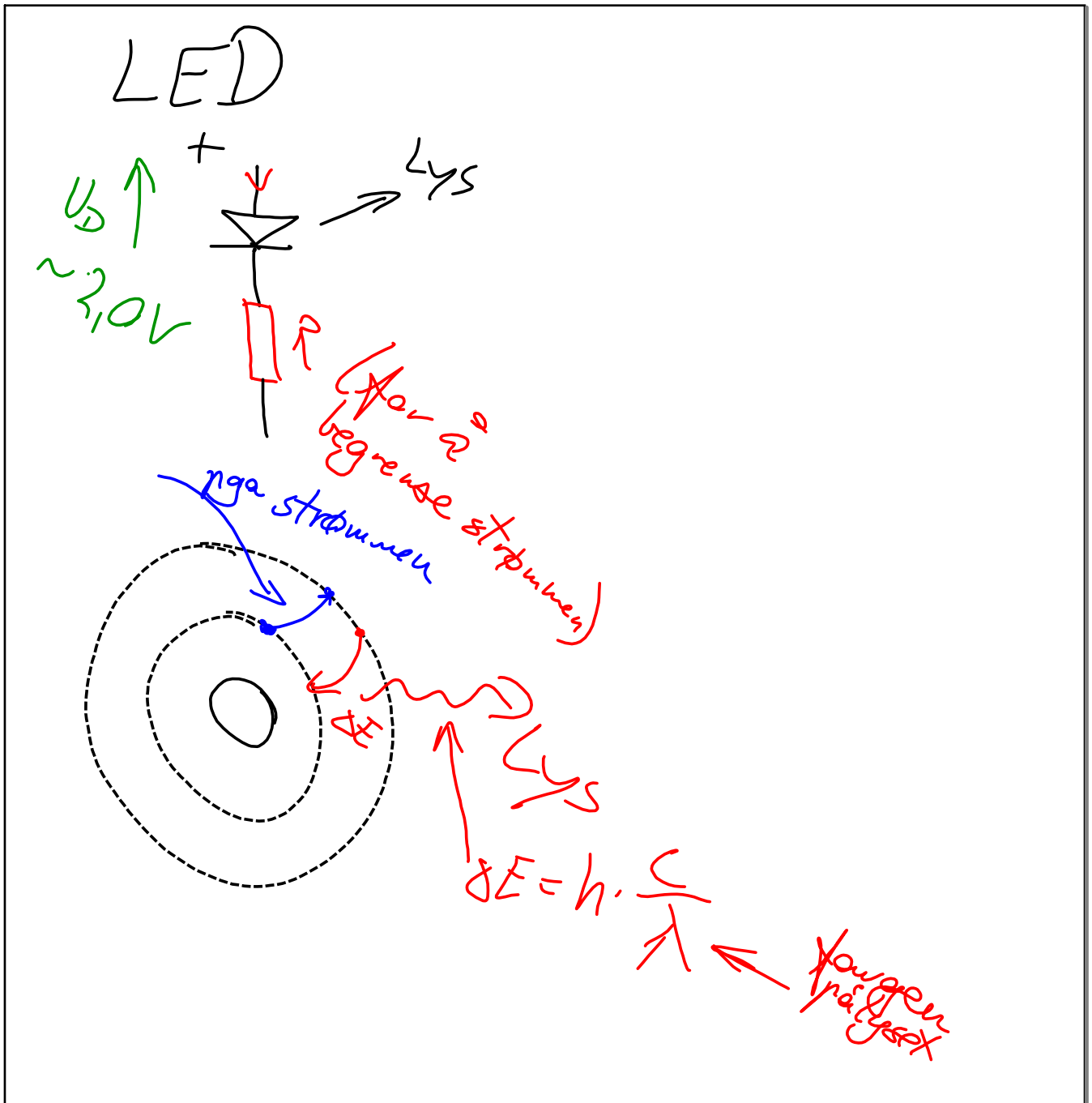
# Photodiode

PIN photodiode  
Avslutning

PIN



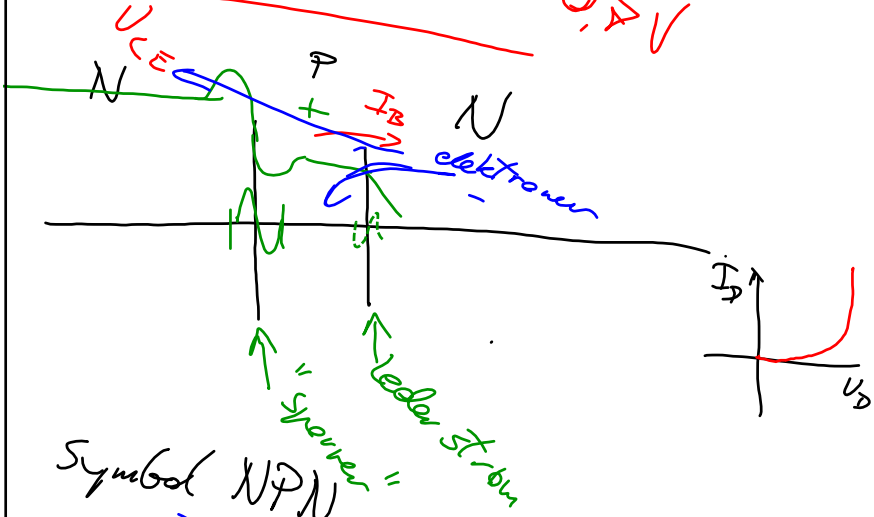
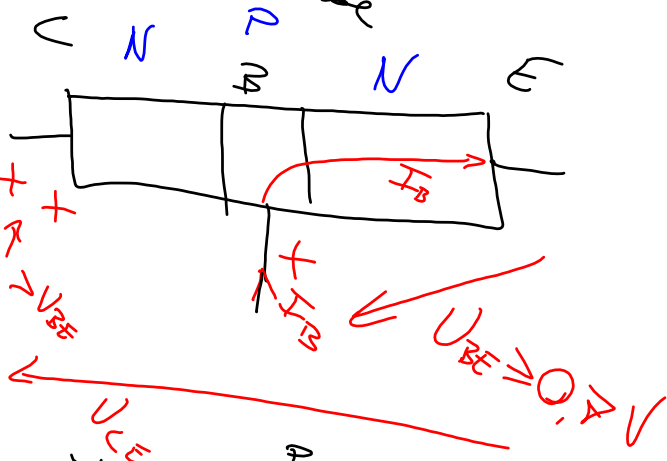
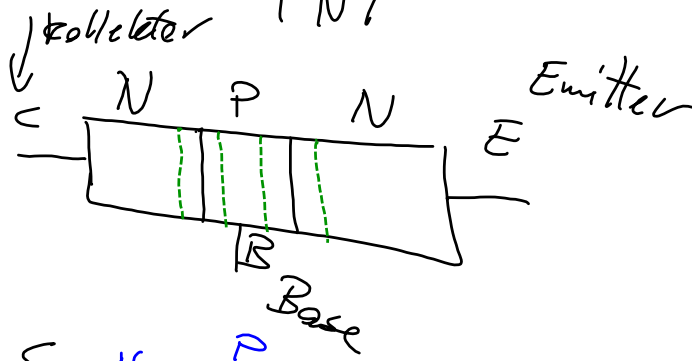




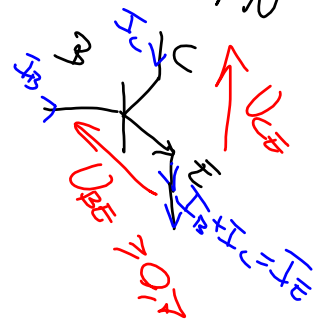
# Transistor

• Bipolar transistor  
- NPN

- PNP



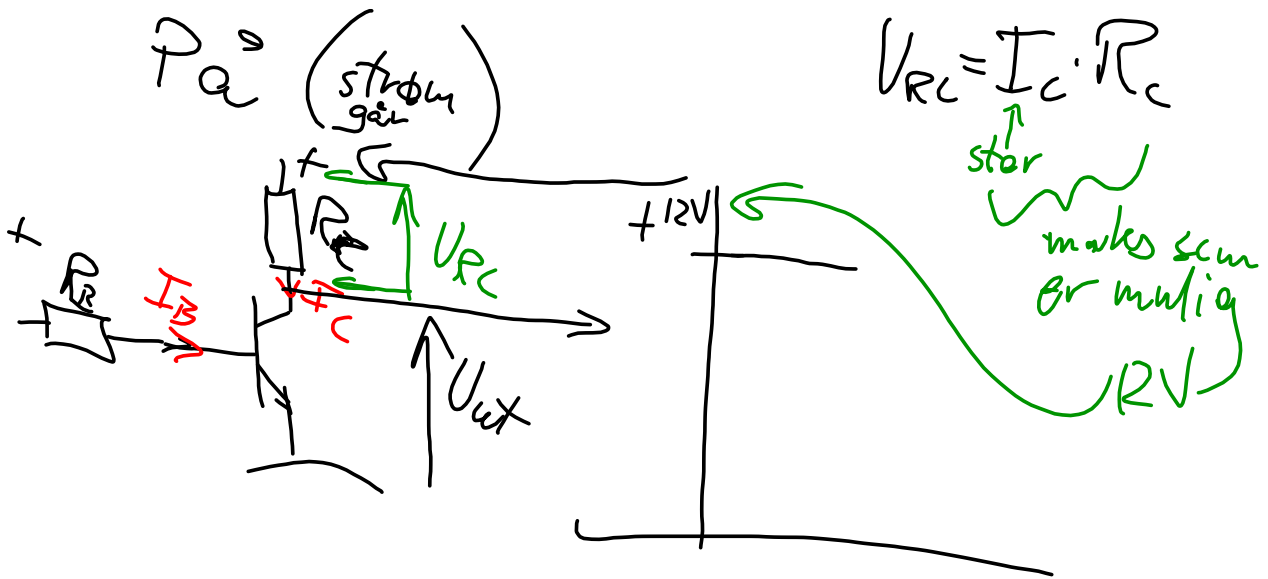
Symbol NPN



Strömforsterkningsfaktoren  $\beta$ ,  $h_{FE}$

$$\beta = \frac{I_C}{I_B}$$

En transistor er "på" eller "av"  
(i digital teknikk)



$$V_{out} = 12,0V - V_{RC} = 12,0 - 12,0 = 0,0V$$

