

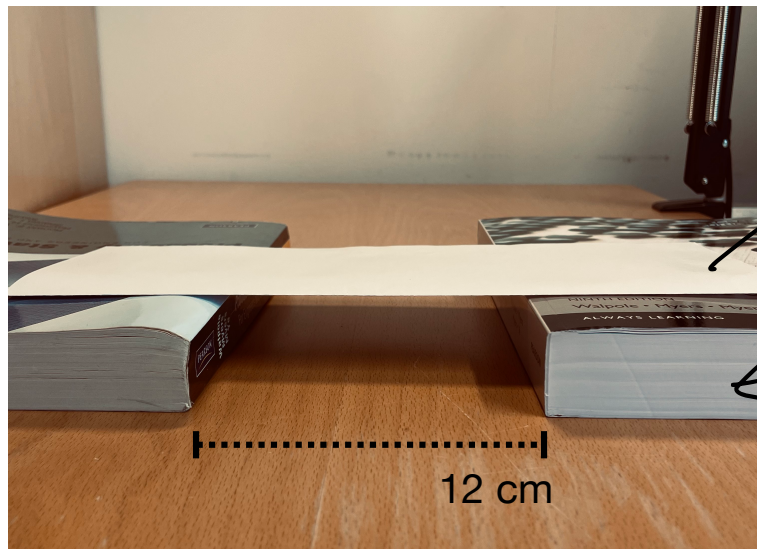
Introduksjon til forsøksplanlegging med 2-nivå faktorielle forsøk

Thea Bjørnland

Institutt for matematiske fag

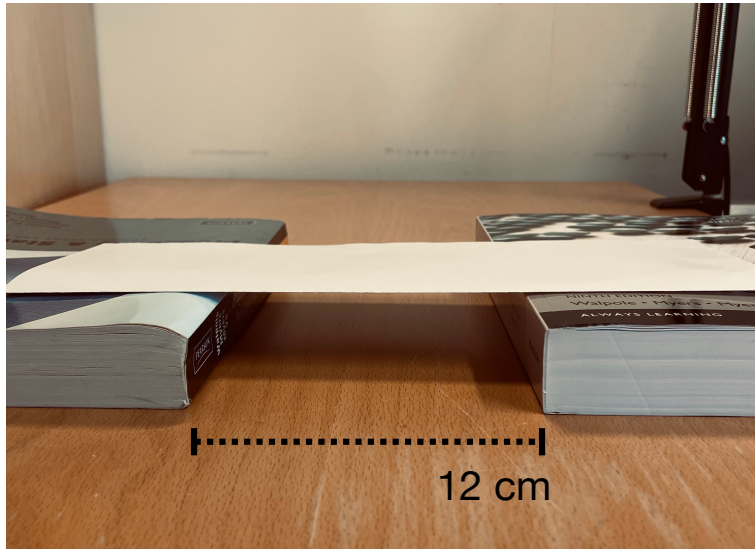
NTNU

Papirbro - hvor mye vekt tåler den?

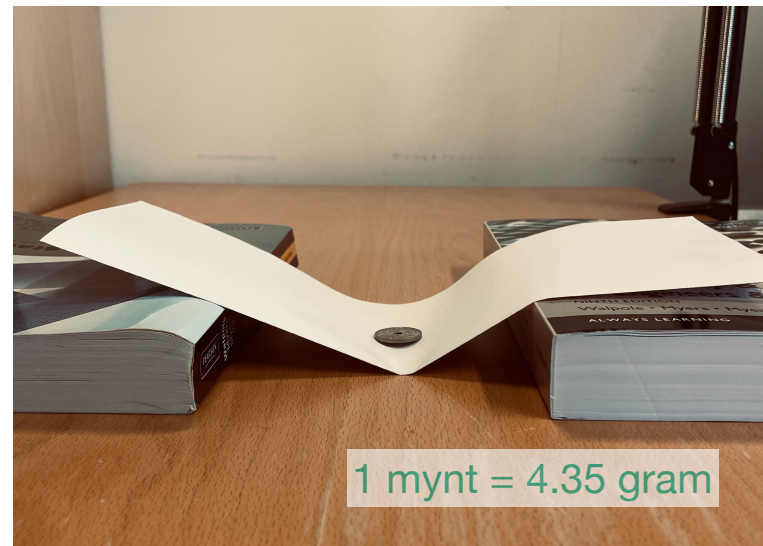


4.35 gram

Papirbro - hvor mye vekt tåler den?

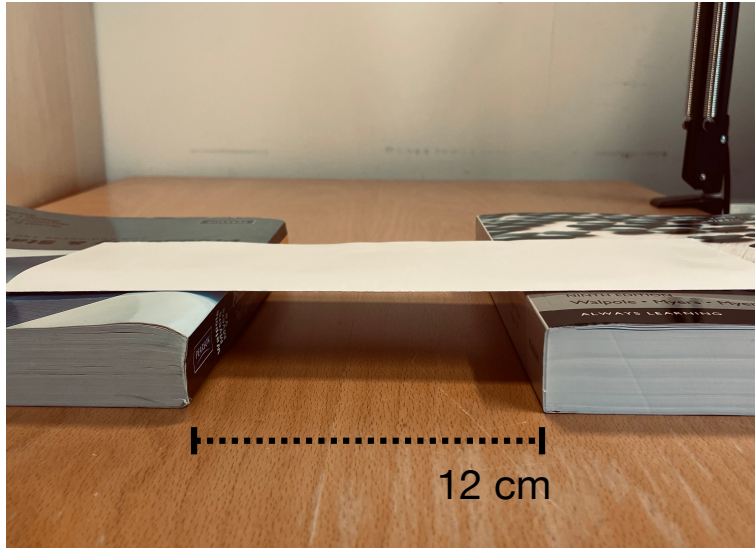


4.35 gram



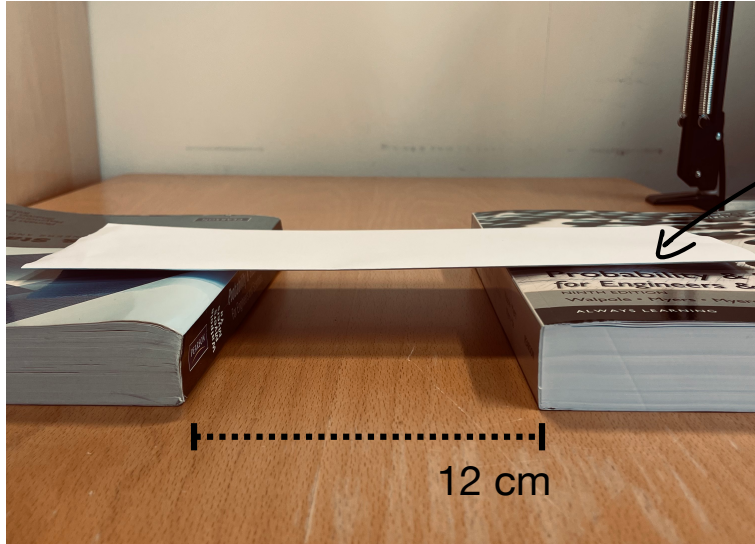
observert bæreevne på 0 gram

Papirbro - hvor mye vekt tåler den?



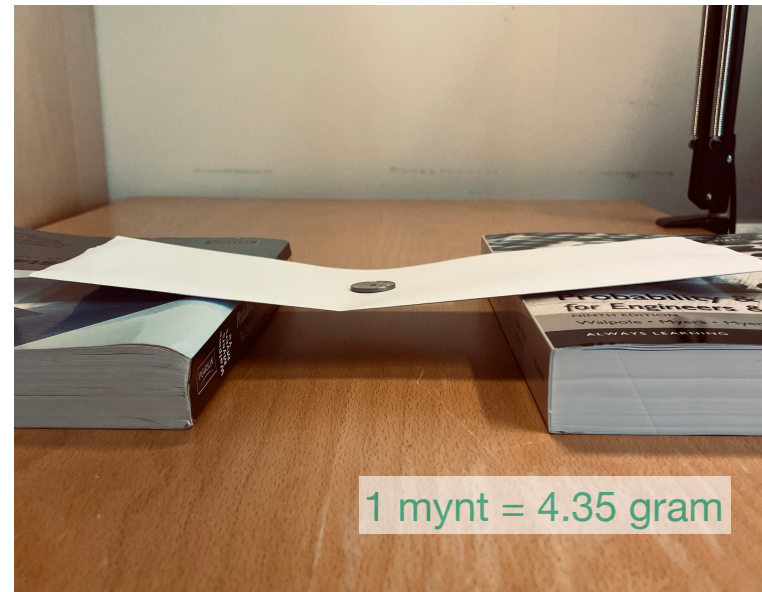
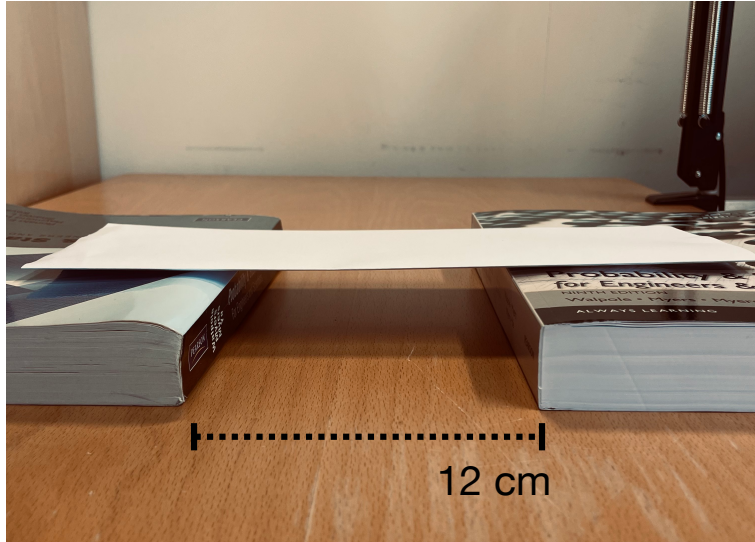
Hva kan endres?

Faktor: Papirtype

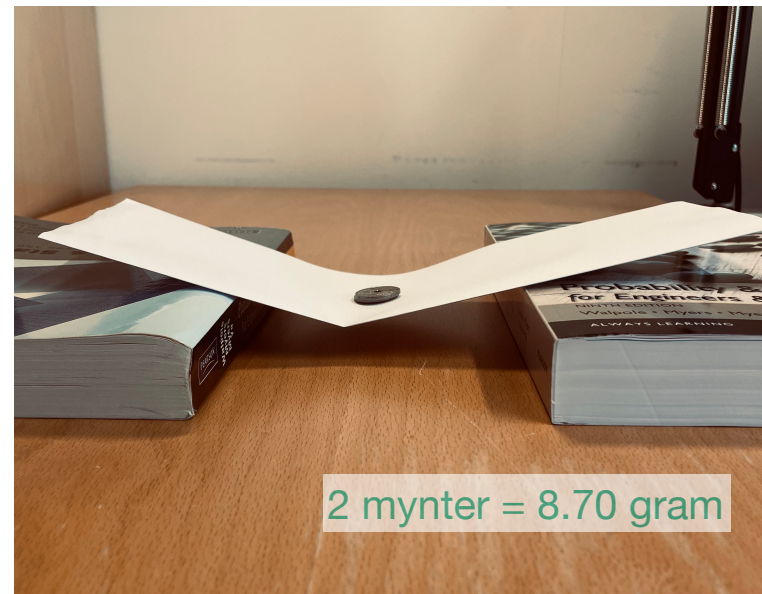
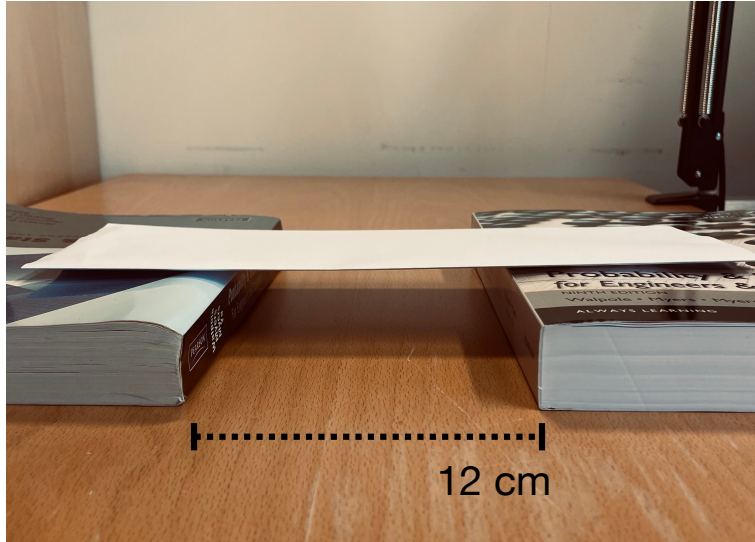


hvit Hark

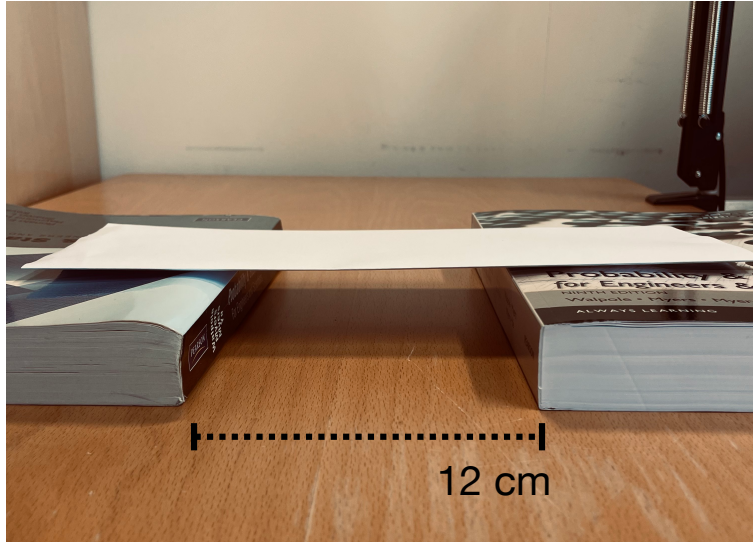
Faktor: Papirtype



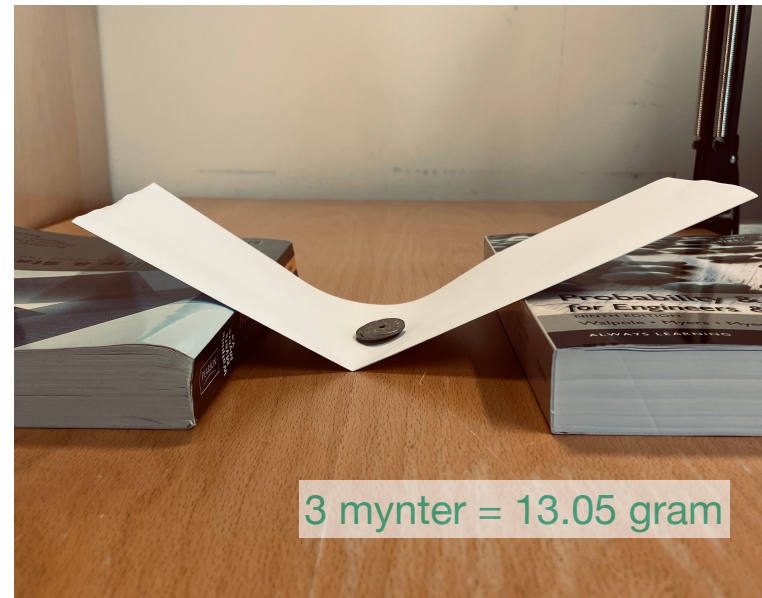
Faktor: Papirtype



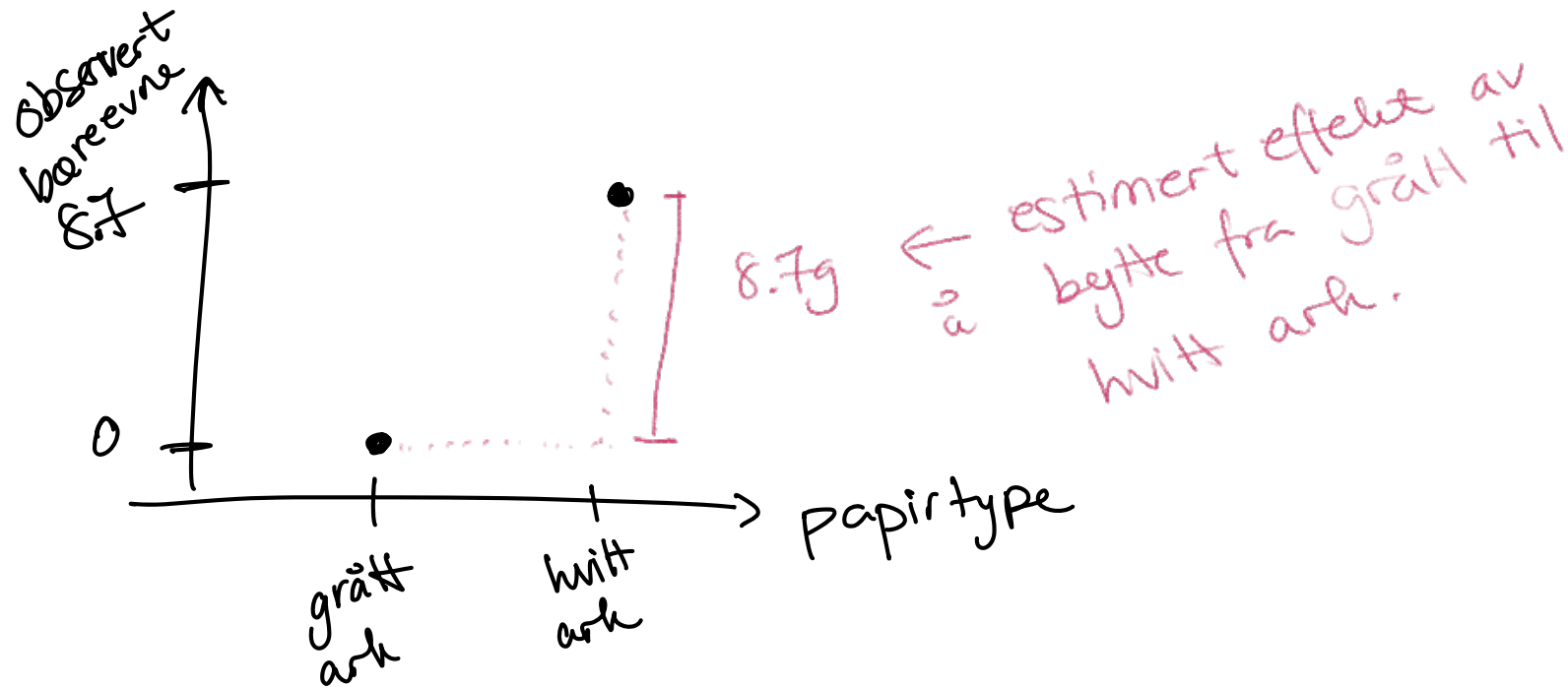
Faktor: Papirtype



observert bæreevne
med hvitt ark på 8,7 gram
(2 mynter)



Estimert effekt av å endre papirtype



Estimert effekt av å endre papirtype

Statistisk modell for beregning i 2-nivå faktoriell forsøk

Y : bæreevne (i gram)

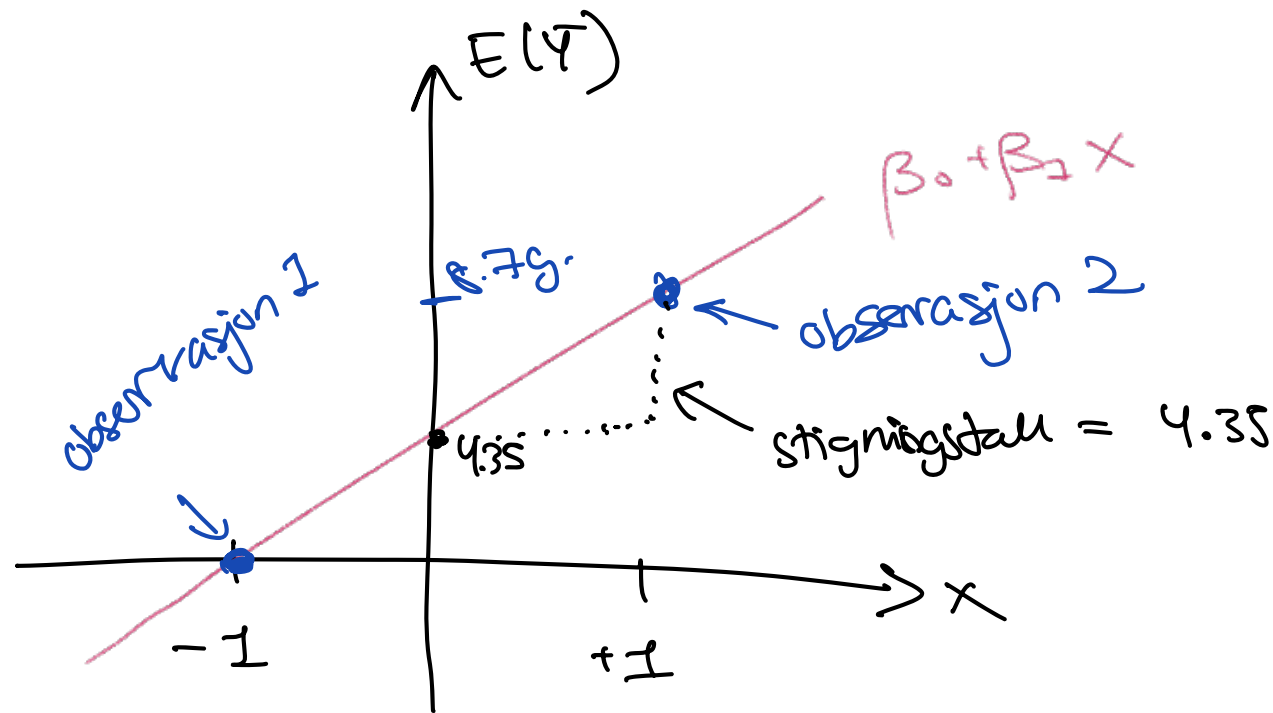
X : faktornivåer

her

$$X = \begin{cases} -1 \\ +1 \end{cases}$$

grønt ark (lavt nivå)

hvit ark (høyt nivå)



(enkel lineær regresjon som i fellesmodul)