

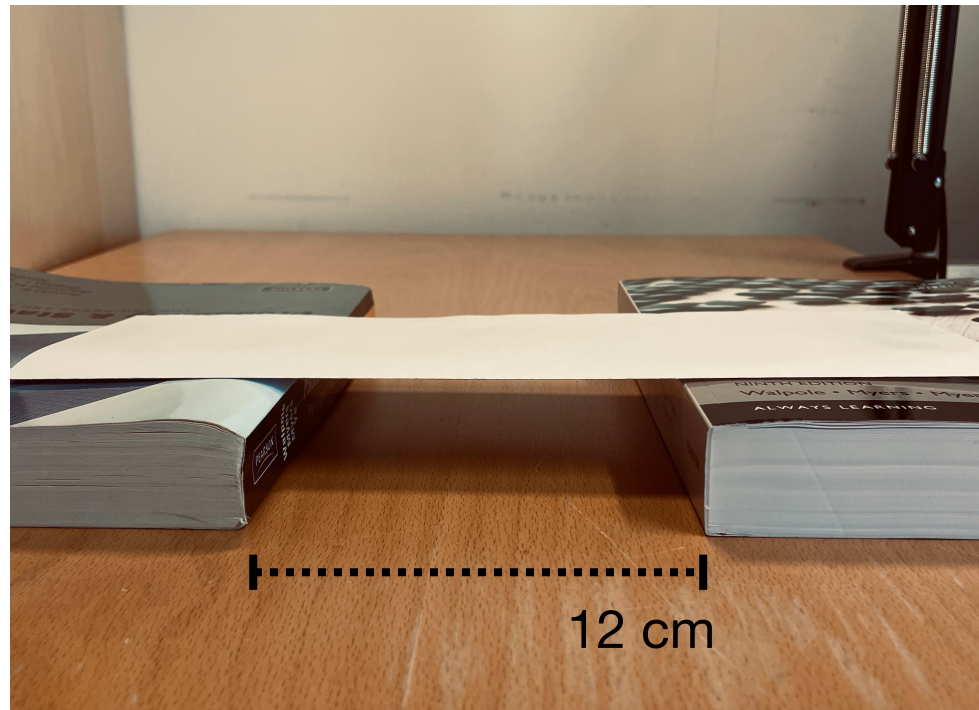
Introduksjon til forsøksplanlegging med 2-nivå faktorielle forsøk

Thea Bjørnland

Institutt for matematiske fag

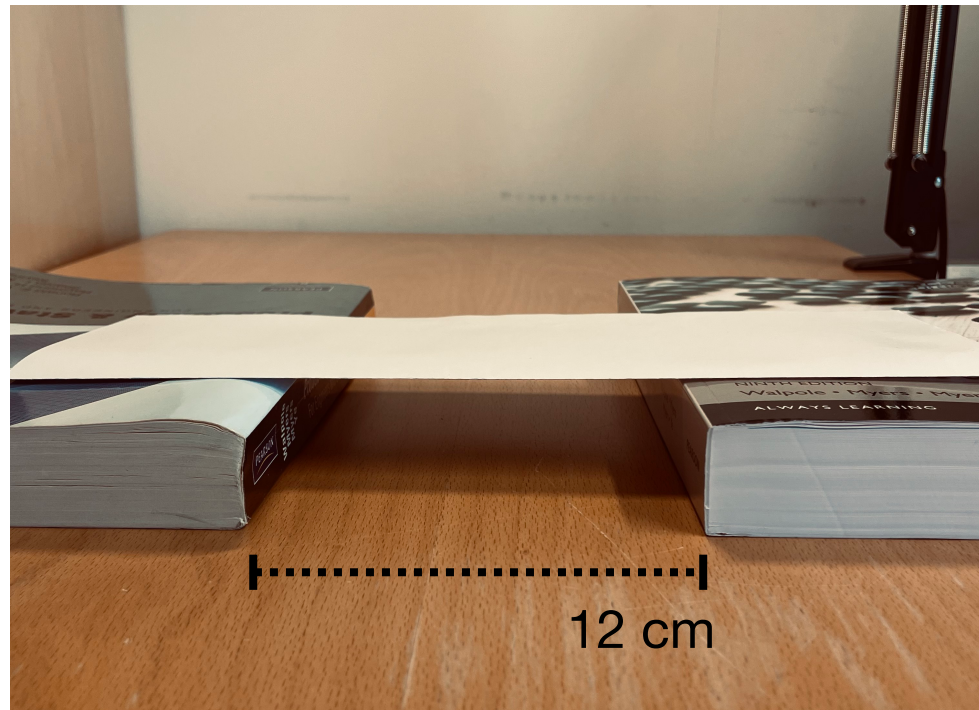
NTNU

Papirbro - hvor mye vekt tåler den?



4.35 gram

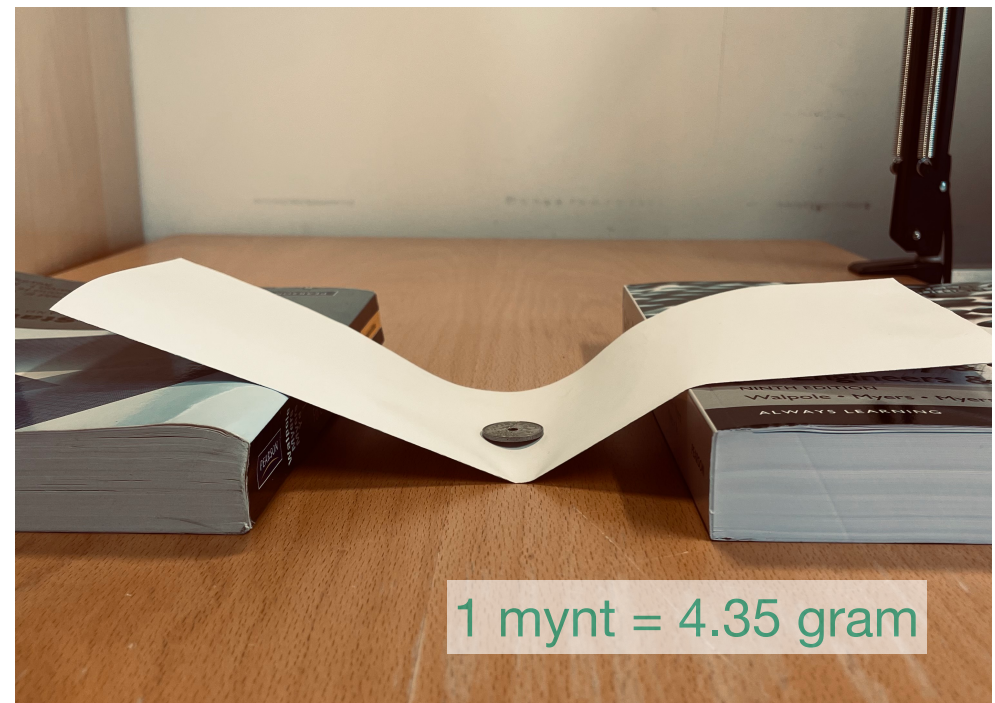
Papirbro - hvor mye vekt tåler den?



12 cm

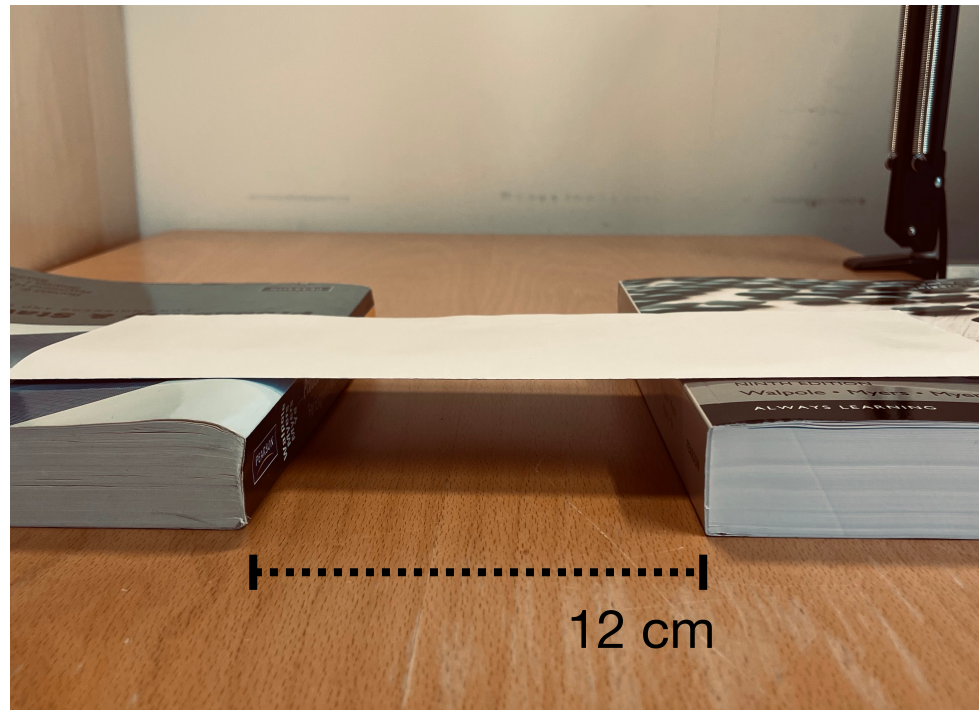


4.35 gram



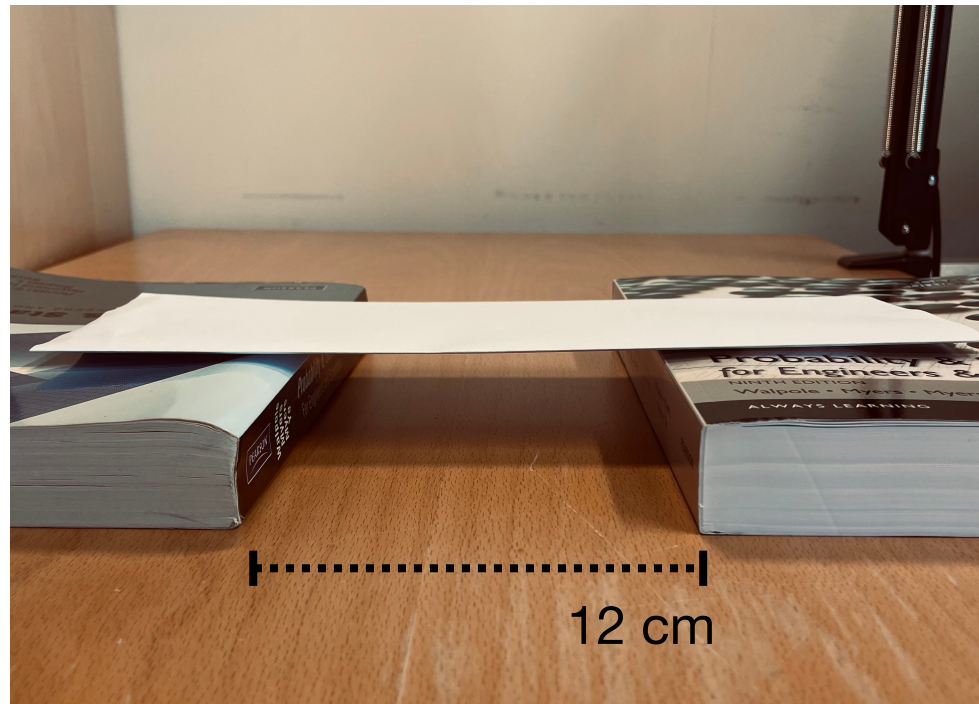
1 mynt = 4.35 gram

Papirbro - hvor mye vekt tåler den?

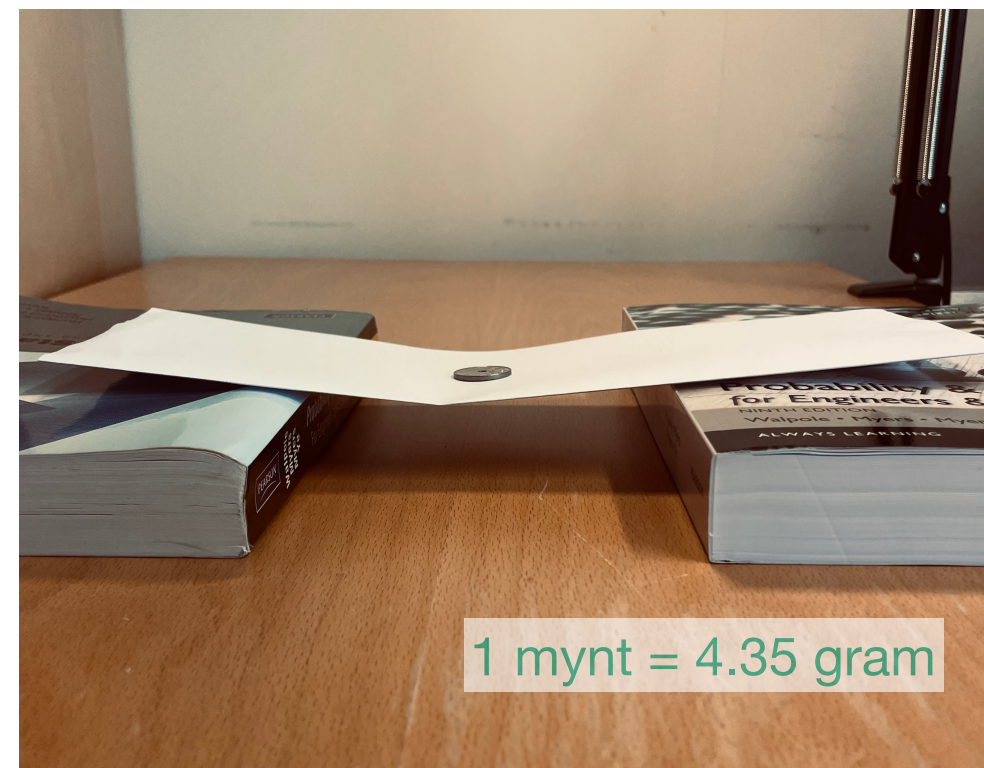
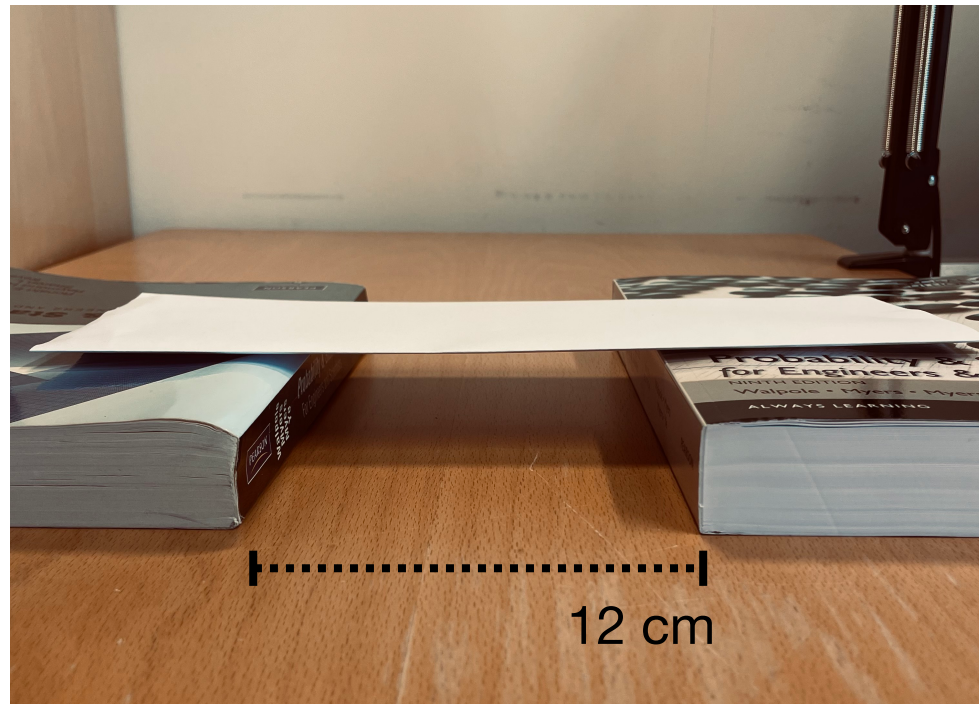


Hva kan endres?

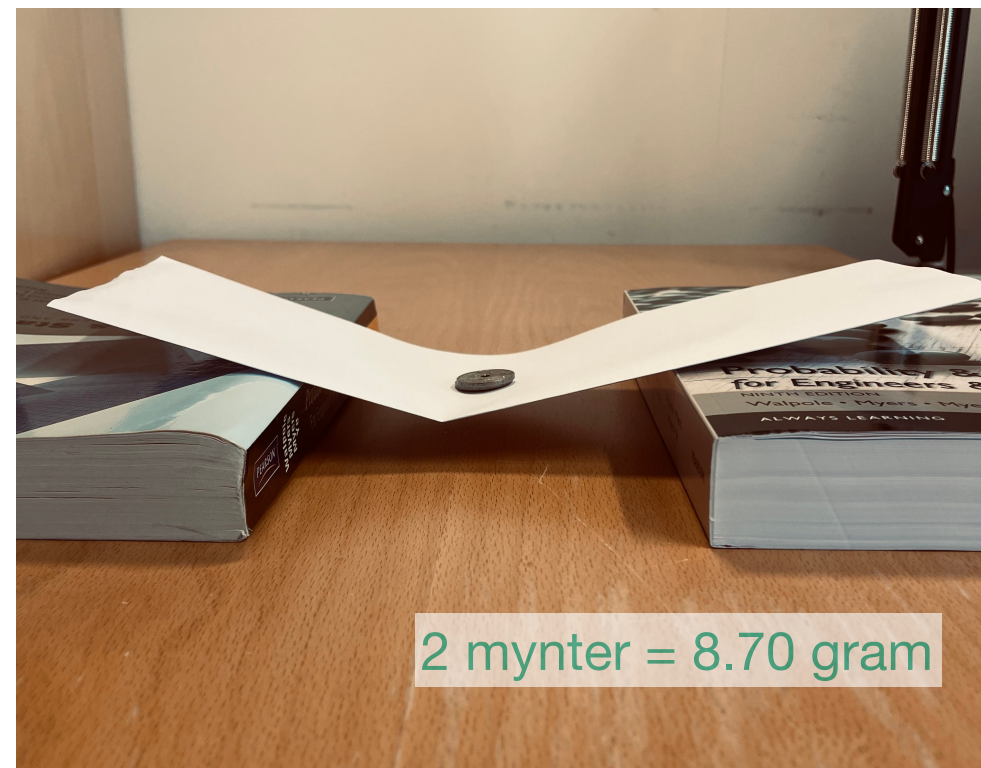
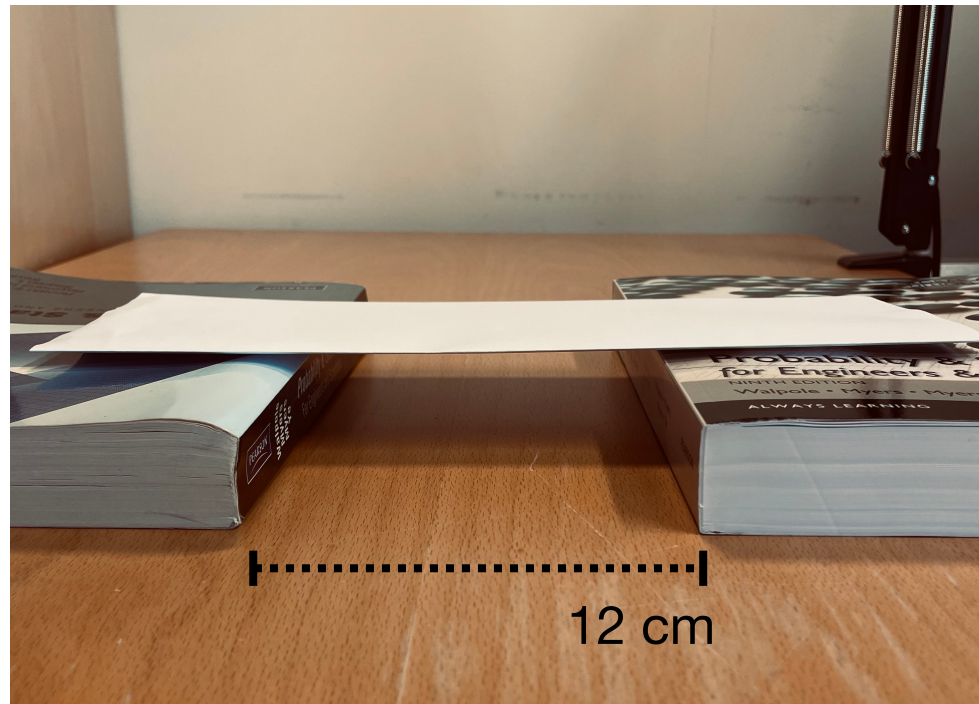
Faktor: Papirtype



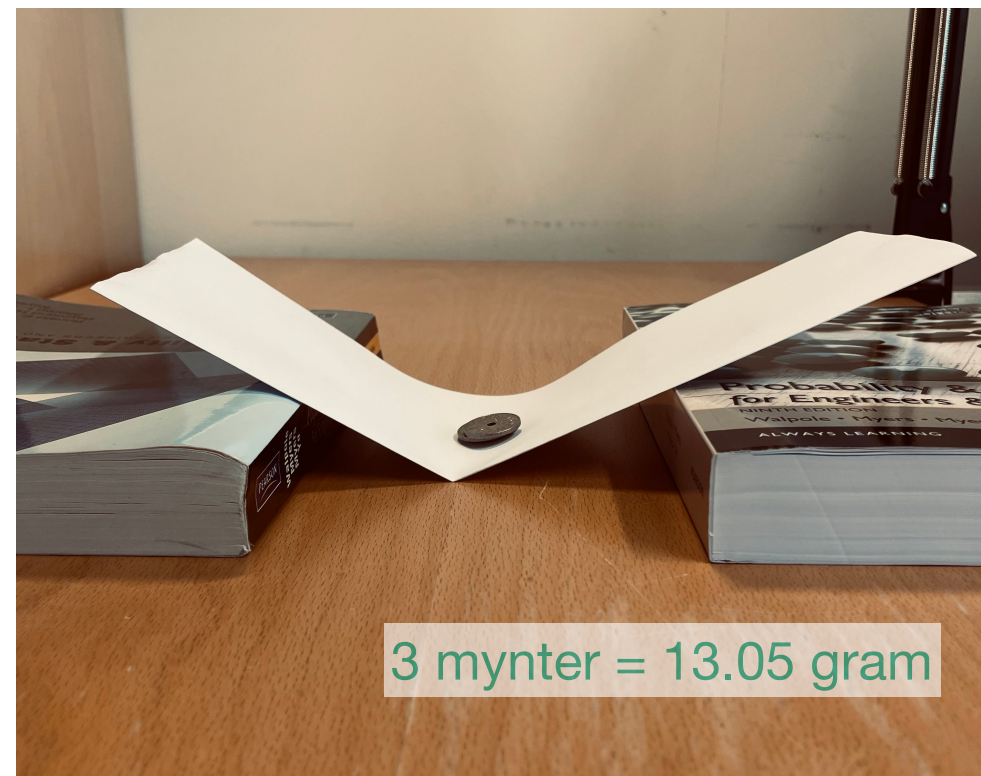
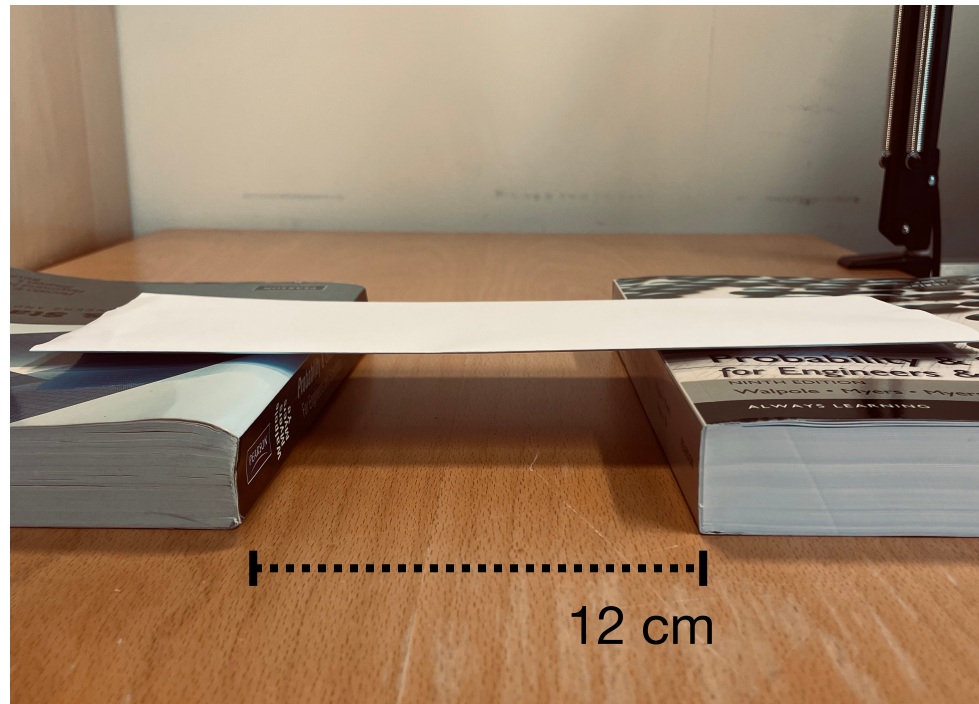
Faktor: Papirtype



Faktor: Papirtype



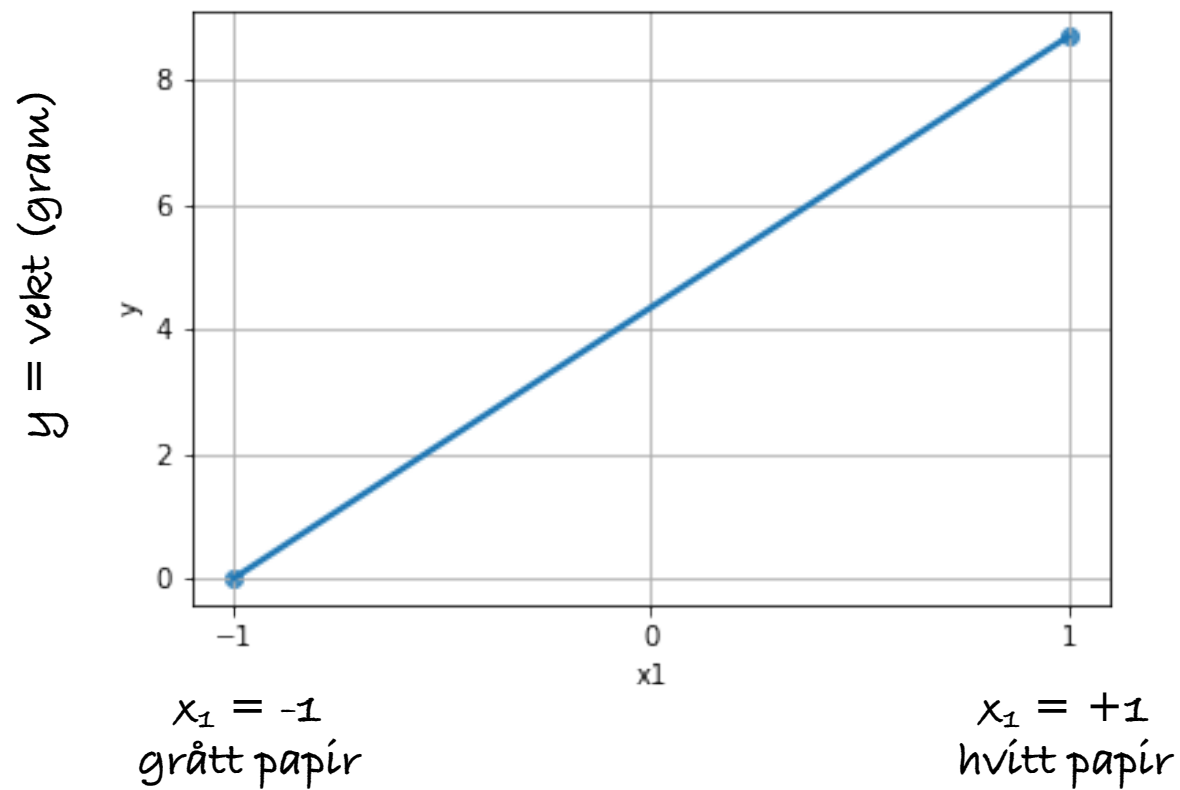
Faktor: Papirtype



Estimert effekt av å endre papirtype

Estimert effekt av å endre papirtype

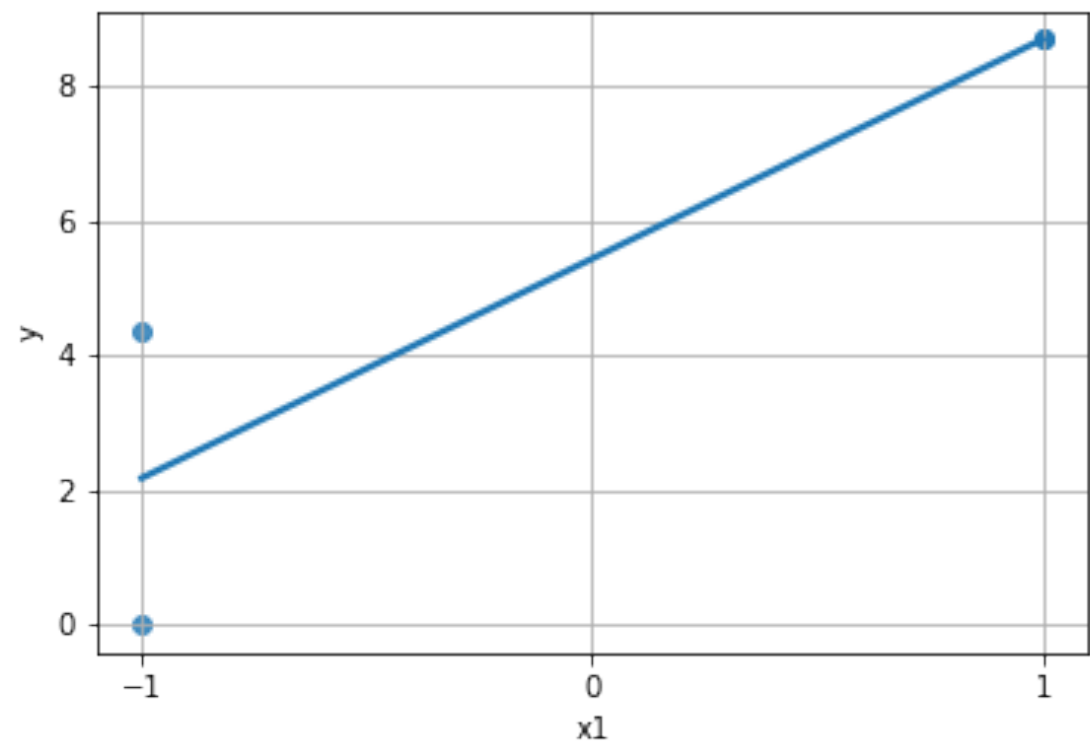
Signifikant effekt eller tilfeldig variasjon?



	coef	std err	t	P> t	[0.025	0.975]
Intercept	4.3500	inf	0	nan	nan	nan
x1	4.3500	inf	0	nan	nan	nan

Papirbro - flere målinger

x1	y
-1.0	0.00
1.0	8.70
-1.0	4.35
1.0	8.70



$$y = 5.44 + 3.2625 x_1$$

	coef	std err	t	P> t	[0.025	0.975]
Intercept	5.4375	1.087	5.000	0.038	0.758	10.117
x1	3.2625	1.087	3.000	0.095	-1.417	7.942