

Repweek 8

2^3 experiment on standardform

A	B	C	AB	AC	BC	ABC	levelcode	y
-	-	-	+	+	+	-	1	60
+	-	-	-	-	+	+	a	72
-	+	-	-	+	-	+	b	54
+	+	-	+	-	-	-	ab	68
-	-	+	+	-	-	+	c	52
+	-	+	-	+	-	-	ac	83
-	+	+	-	-	+	-	bc	45
+	+	+	+	+	+	+	abc	80

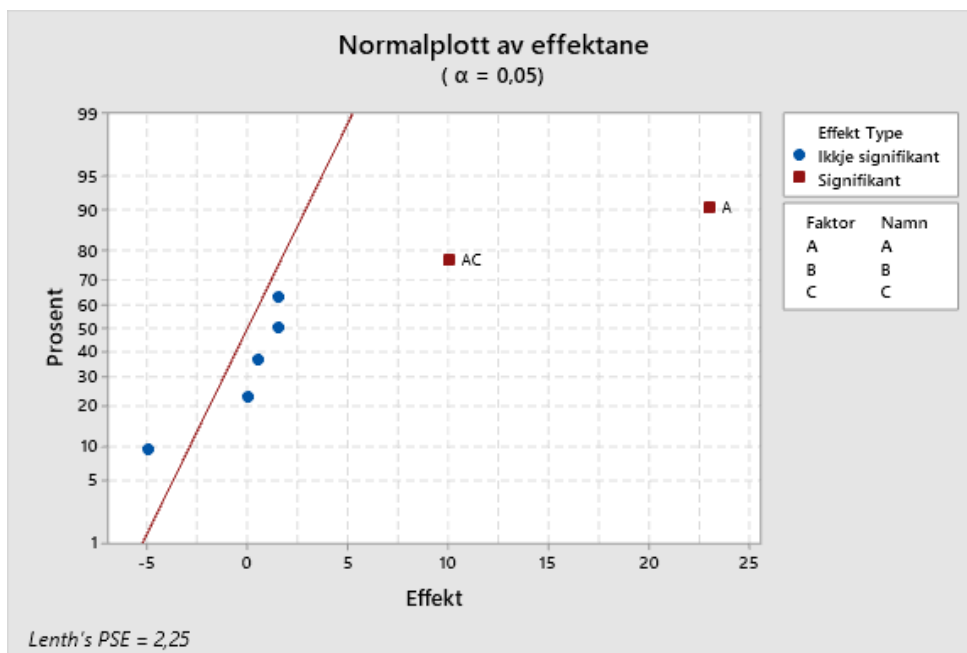
>Calulation of effects

$$\bar{y}_H - \bar{y}_L$$

Variance

$$\text{Var}(\bar{y}_H - \bar{y}_L) = \frac{4\sigma^2}{n}$$

Evaluation of significance



σ_{effekt}^2 is given by: $\frac{AB\hat{C}^2 + AB\hat{D}^2 + AC\hat{D}^2 + BCD\hat{D}^2 + ABCD\hat{D}^2}{5}$

Replicates

Average over $\sum_{j=1}^m \frac{(Y_{ij} - \bar{Y}_i)^2}{m-1}, i=1,2,\dots,n$

Interpretation

