

UKE 35:**UKE 36:****Oppgave 6.4.4.**

- a) $t_0 = 1.895$.
- b) $t_0 = 1.895$.

Oppgave 6.4.10.

$$\Pr\{a < S^2/\sigma^2 < b\} = \Pr\{\chi_{n-1}^2 < (n-1)b\} - \Pr\{\chi_{n-1}^2 < (n-1)a\}.$$

Oppgave 3.

- d) $[[2n\hat{p} + z^2 - c]/[2(n + z^2)], [2n\hat{p} + z^2 + c]/[2(n + z^2)]]$, hvor $c = z(z^2 + 4n\hat{p}(1 - \hat{p}))^{1/2}$
og $z = z_{1-\alpha/2}$.

UKE 37:**Oppgave 8.10.6.**

- a) $\text{lik}(p|\text{data}) = \binom{n}{x} p^x (1-p)^{n-x}$, $\frac{d}{dp} l(p|\text{data}) = \frac{x}{p} - \frac{n-x}{1-p} = 0 \Rightarrow \hat{p} = \frac{x}{n}$.
- b) Du skal få at $l(p)$, hvor $0 \leq p \leq 1$, har toppunkt i $p = 1/2$.