

(5) $n=4$, $\bar{x}=544.75$, $SD=79.101$, $SE=39.85$.

can't do CI $\because$ sample size way too small

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(3)

(6) $n=12$, $S=9.397$, $\bar{x}=104.1333$.

(1) $H_0: \mu=105$

$H_a: \mu \neq 105$

$\mu < 105$
or $\mu > 105$

(2) $t = \frac{\bar{x} - \mu}{s/\sqrt{n}} = -0.319499$

$df = 11$

(3) p-value with $df=11$, $|t\text{-statistics}| < 2.70$.

~~imply $\mu < 105$~~

~~(4)~~ $\because$ 2-sided test, $p\text{-value} = 2(0.25) = 0.5$ ~~reject H_0~~

(4) $p\text{-value} > 5\%$. $\therefore$ NOT reject H_0 and. This is ~~conclude that $\mu = 105$~~ insufficient

(conclude the ^{evidence to} ~~mean~~ is not 105)

(7) $\hat{p} = \frac{11}{50} = 0.22$ $p=0.5$

(1) $H_0: p=0.5$ $H_a: p \neq 0.5$

(2) $Z_{cal} = \frac{\hat{p} - p}{\sqrt{\frac{p(1-p)}{n}}} < 0$

(3) $p\text{-value} = 2 \cdot P(Z > |Z_{cal}|)$

(4) if $p\text{-value} < 5\%$. reject H_0 .
else NOT reject H_0 .