6. (1) $H_0 = \mu = 4.3$, $H_1 = \mu \neq 4.3$ $\alpha = 0.05$

$C = |Z| > Z_{\frac{\alpha}{2}} = |Z| > 1.96$

$Z = \dfrac{4.65 - 4.3}{\frac{1.26}{\sqrt{40}}} = 1.757$

不棄卻 H_0.

(2) $H_0 = \mu = 4.3$ $H_1 = \mu \neq 4.3$ $\alpha = 0.05$

$C = |Z| > 1.96$

$Z = \dfrac{4.65 - 4.3}{\frac{1.26}{\sqrt{80}}} = 2.485$

棄卻 H_0.

7. $H_0 = \mu_1 = \mu_2$, $H_1 = \mu_1 \neq \mu_2$ $\alpha = 0.05$

$C = |Z| > Z_{\frac{\alpha}{2}}$ $C = |Z| > 1.96$

$Z = \dfrac{3.83 - 40.1}{\sqrt{\frac{40}{100} + \frac{30}{80}}} = -2.045$

棄卻 H_0.

8. $H_0 = \mu_1 = \mu_2$ $H_1 = \mu_1 \neq \mu_2$ $\alpha = 0.05$

$C = |Z| > 1.96$

$Z = \dfrac{32 - 34}{3.430\sqrt{\frac{1}{64} + \frac{1}{81}}} = -3.486$ $S_p = \sqrt{\dfrac{63(3.2)^2 + 80(3.6)^2}{143}} = 3.430$

棄卻 H_0.