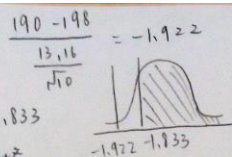
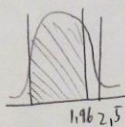


助教出的習題

1) $H_0: m \geq 198$
 $H_1: m < 198$
 $\alpha = 0,05$
 $t_{0,05}(9) = -1,833$
 拒絕 $H_0 \Rightarrow$ 合格

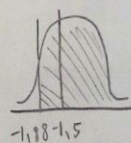


2) $H_0: m = 420$
 $H_1: m \neq 420$
 $\alpha = 0,05, \frac{\alpha}{2} = 0,025$
 $z_{0,025} = 1,96$
 $\frac{423 - 420}{\frac{12}{\sqrt{100}}} = 2,5$



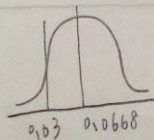
拒絕 $H_0 \Rightarrow$ 規格改變

3) $H_0: m \geq 70$
 $H_1: m < 70$
 $z_{0,03} = -1,88$



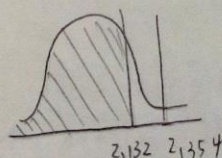
不拒絕 $H_0 \Rightarrow$ 成績沒有不如去年

4) $P(Z < 1,5)$
 $= 0,0668 > 0,03$
 \Rightarrow 不拒絕 H_0



5) $H_0: m \leq 1,5$
 $H_1: m > 1,5$

$z_{0,05}(4) = 2,132$



$\frac{1,52 - 1,5}{\frac{0,09}{\sqrt{5}}} = 2,1304$

拒絕 $H_0 \Rightarrow$ 超標合格