

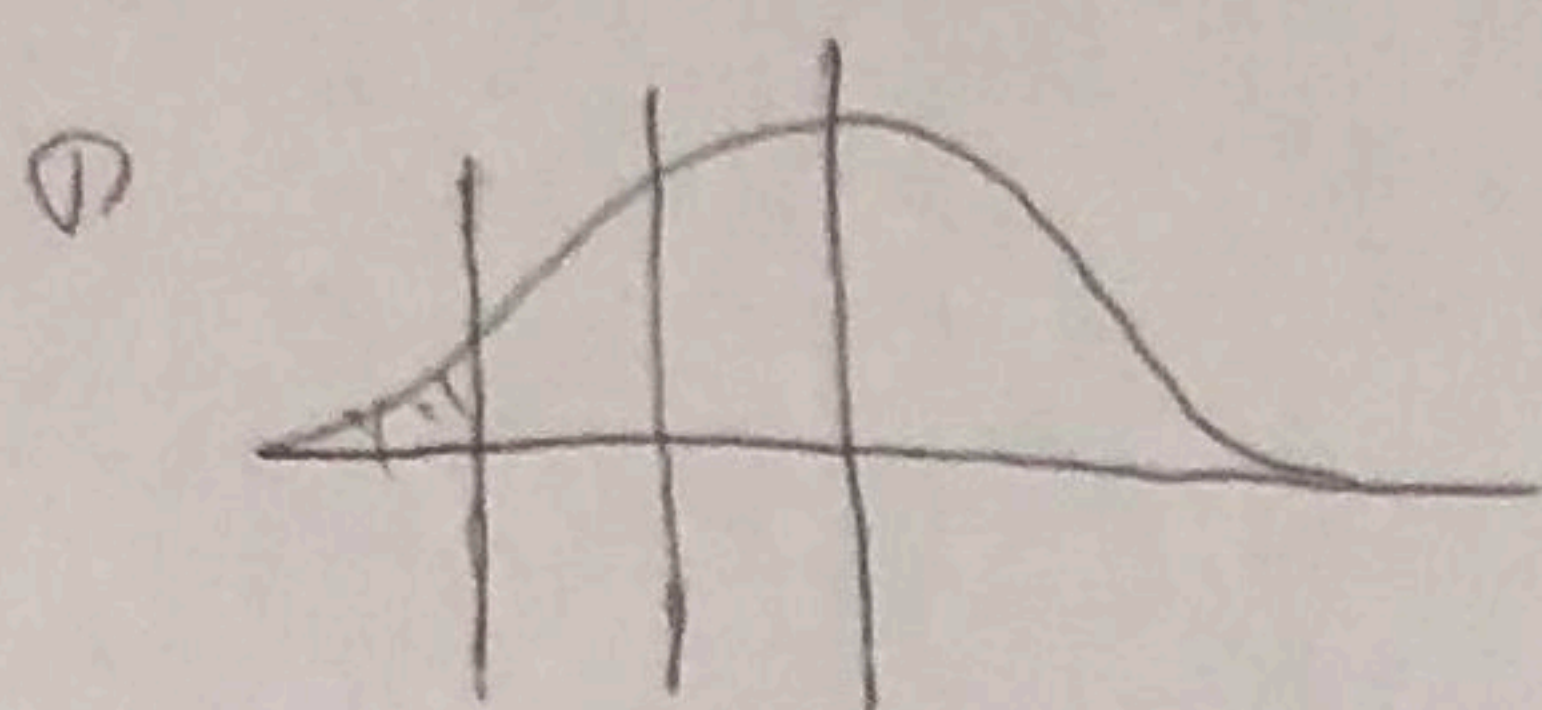
$$1. H_0: \mu \geq 1.98$$

$$H_1: \mu < 1.98$$

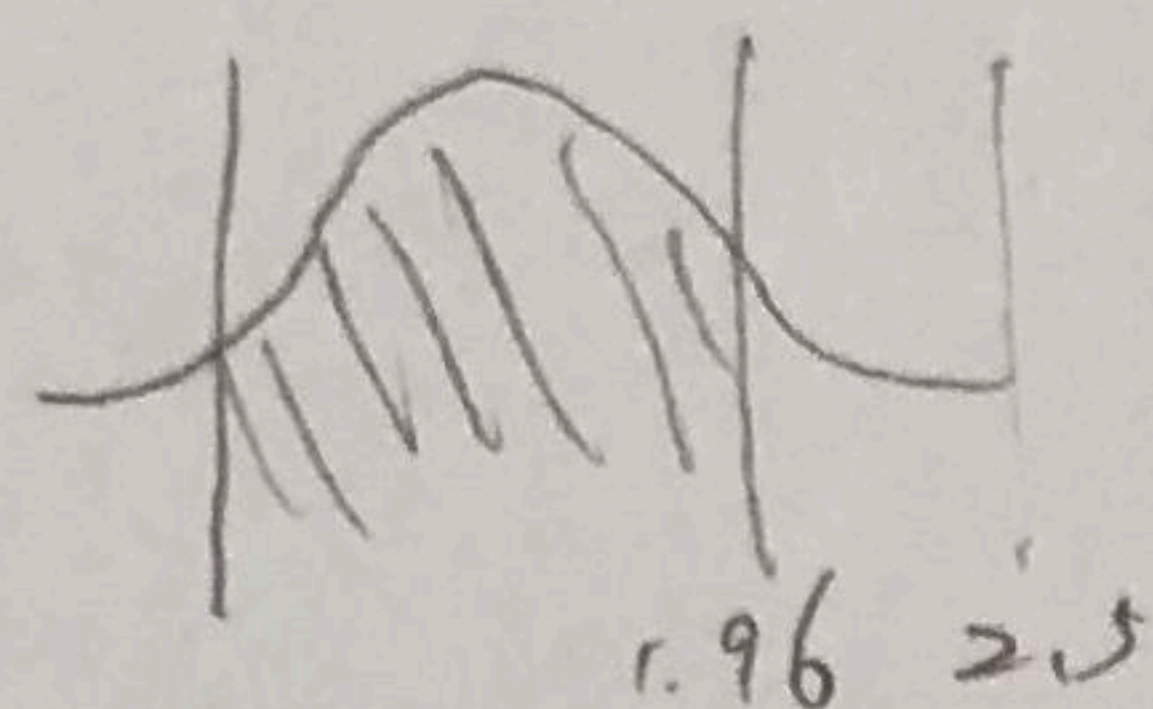
$$\alpha = 0.05$$

$$t_{0.05}(9) = -1.833$$

拒絕 $H_0 \Rightarrow$ 合格



② 拒絕 $H_0 \Rightarrow$ 規格改變



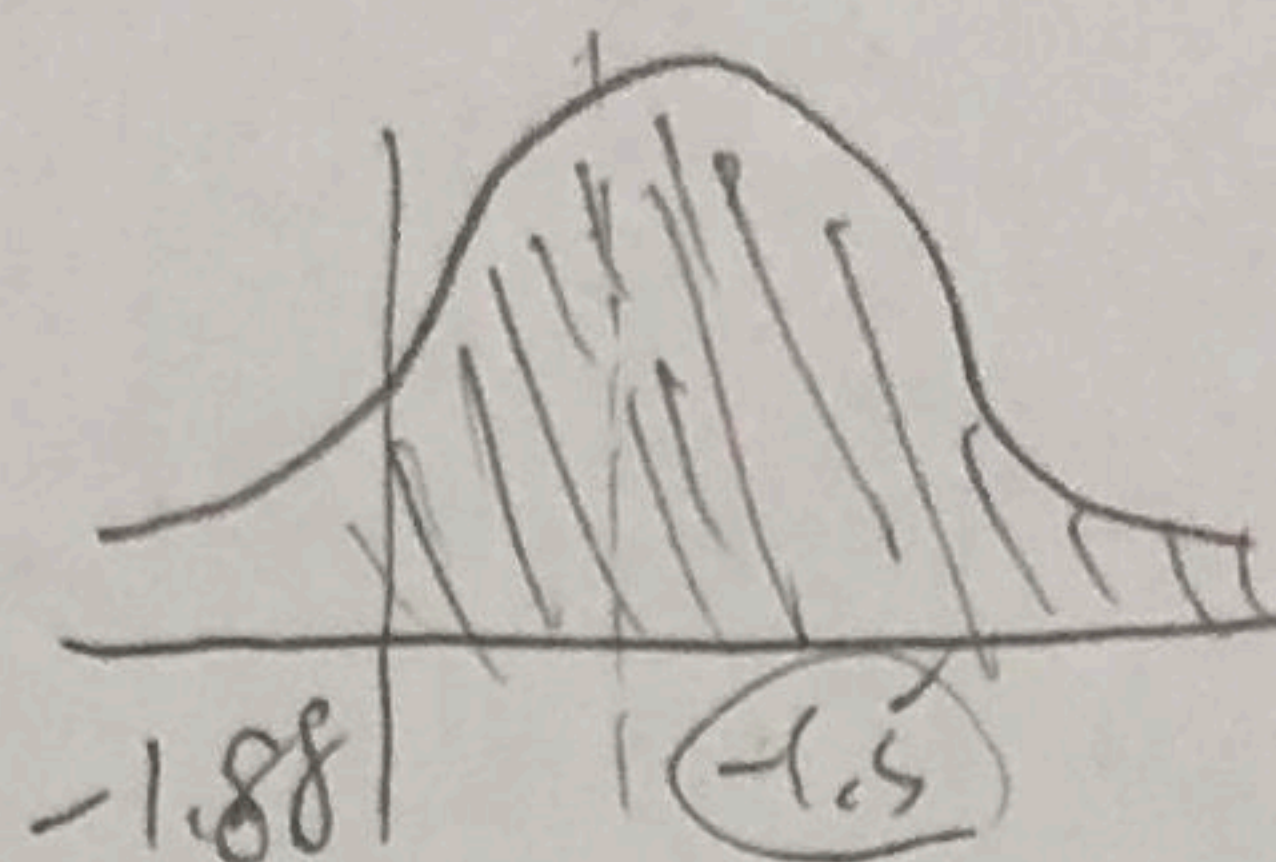
$$2. H_0: \mu = 420$$

$$H_1: \mu \neq 420$$

$$\alpha = 0.05 = \frac{\alpha}{2} = 0.025$$

$$Z_{0.025} = 1.96$$

$$\frac{427 - 420}{\frac{12}{\sqrt{100}}} = 2.5$$



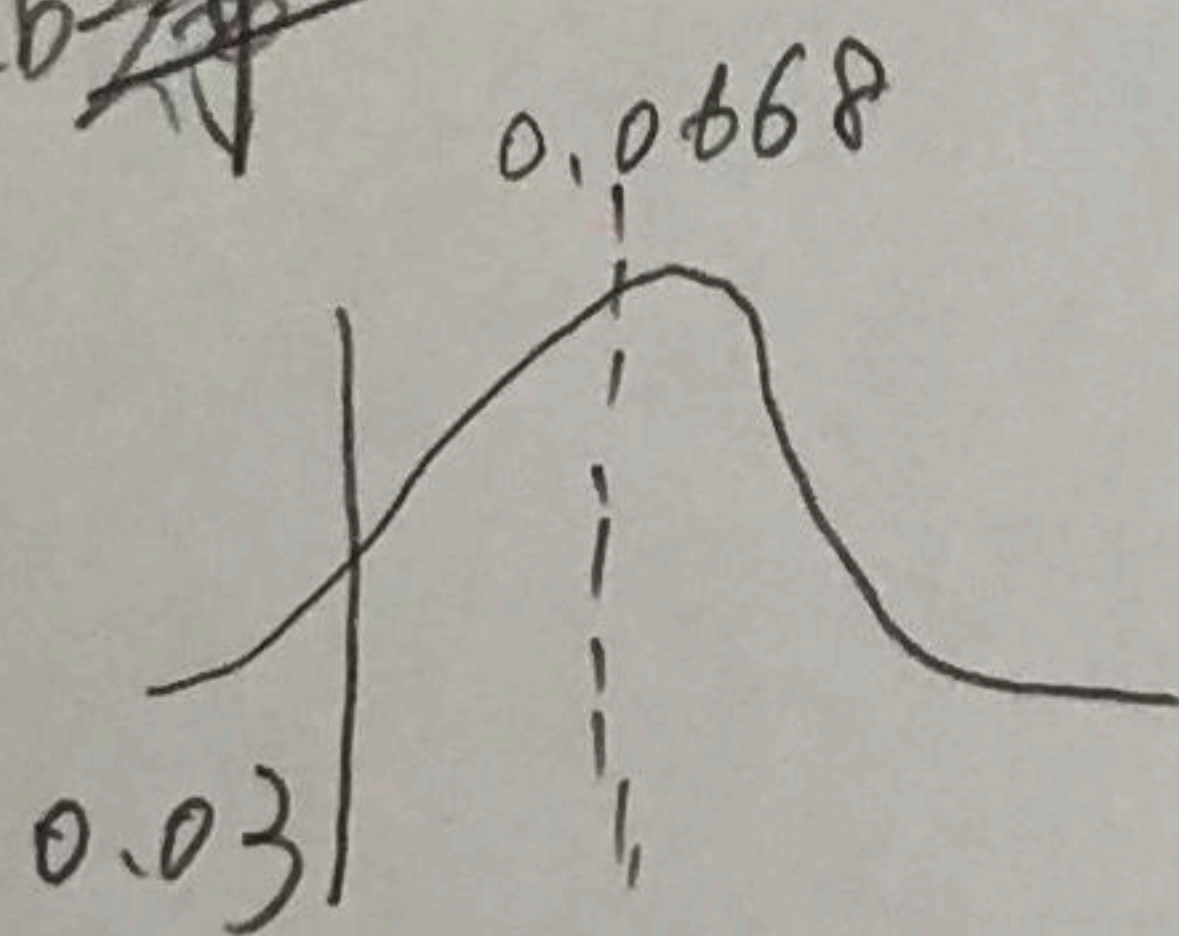
$$3. H_0: \mu \geq 70$$

$$H_1: \mu < 70$$

$$Z_{0.03} = -1.88$$

$$= \frac{68.5 - 70}{\frac{7}{\sqrt{36}}} = -1.5$$

不拒絕 $H_0 \Rightarrow$ 成績沒有不如去年



$$4. P(Z < 1.05)$$

$$0.0668 > 0.03$$

不拒絕 H_0

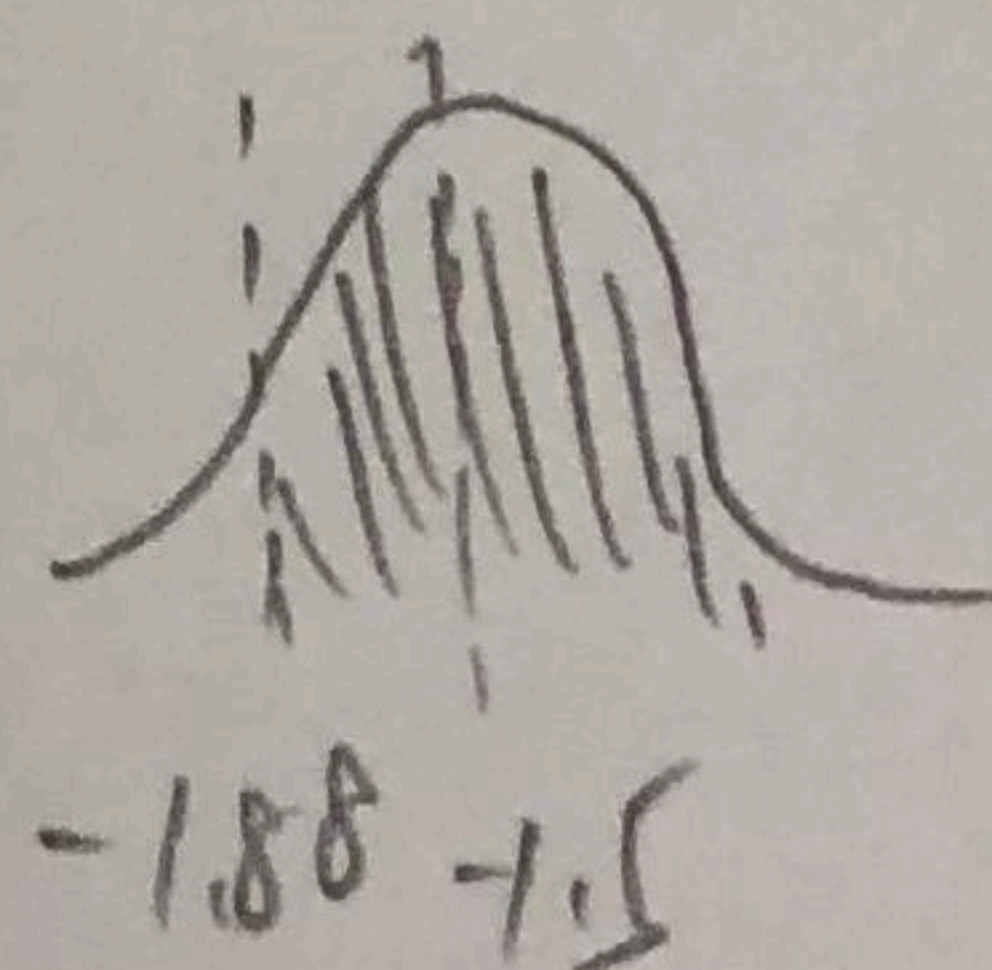
$$5. H_0: \mu \leq 1.5$$

$$H_1: \mu > 1.5$$

$$t_{0.05}(4) = 2.132$$

$$\frac{1.52 - 1.5}{\frac{0.019}{\sqrt{5}}} = 2.354$$

不拒絕 $H_0 \Rightarrow$ 成績沒有不如去年



年終 = 甲
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陳重佑