Chp62-1.Evaluate the effect of e-commerce advertising on two types of advertising A/B, [Is the average purchase amount, advertising B greater than A]?

(1). [Question]: What are the x and y variables of this analysis

question?

廣告	消費金額
廣告1	606.9
廣告1	543
廣告1	370.2
廣告1	722.4
廣告1	671.7
廣告1	593.7
廣告1	581.7
廣告1	562.8
廣告1	648
廣告1	706.2
廣告1	721.5
廣告1	399.3
廣告1	374.7
廣告1	365.4
磨生1	551.1

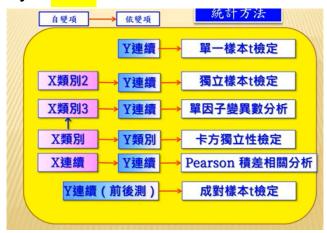
廣告2	624.9
廣告2	643.5
廣告2	812.7
廣告2	422.7
廣告2	936.9
廣告2	816
廣告2	799.5
廣告2	666.6
廣告2	650.4
廣告2	678.6
廣告2	386.7
廣告2	515.1
廣告2	475.8
廣告2	432.3
時かっ	1161

(2).[Question]: What kind of [statistical verification] should be

used for such data?

??? Accreditation

Because x is ??? and y is ???



(3).[Question]: Is this [double-tailed test, or right tail test, or left tail test]?

單尾檢定 (左尾)	雙尾檢定	單尾檢定 (右尾)
$H_0: \mu = \mu_0$ $H_1: \mu < \mu_0$	$H_0: \mu = \mu_0$ $H_1: \mu \neq \mu_0$	$H_0: \mu = \mu_0$ $H_1: \mu > \mu_0$

[Whether there is a difference in the average purchase amount, advertisement A and B] belongs to the ??? Accreditation

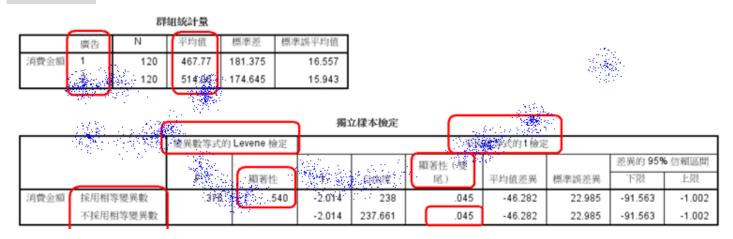
[Whether the average purchase amount, advertising A is greater than B], belongs to the ??? Tail check (single tail check).

[Whether the average purchase amount, ad B is greater than A], belongs to the ??? Tail check (single tail check).

(4).[How to set statistical hypotheses]: [Is the average purchase amount, advertising B greater than A, belongs to the left tail test] 2 hypotheses?

- → Propositions of the question question: average sales amount, ??
 Will it be greater than??
- → Convert to: Statistical Hypothesis:
- 1. H0假設(虛無假設)→否定假設
 - Average sales amount, ????
- 2. H1 hypothesis (opposing hypothesis) → affirmative hypothesis
 - Average sales amount, ?????
- → [Note]: HO nihilistic hypothesis/negative hypothesis: is the opposite of the proposition
- → [Note]: H1 Opposing Hypothesis/Affirmative Hypothesis: is the affirmation of a proposition

(5).[Question]: The average sales amount, B will be greater than A?



Step 1: Look at the pronounced p-value of [Levene Test]: Significance p-value 054>0.05→→ means that 2 maternal variants are accepted[???].

Therefore, it is necessary to choose the ??? of the mean equation t test significant p-values (???)

Step 2: Look at the T Determination of the Mean Equation for the Apparent P-Value:

The one-tail test is divided by 2

Significance p-value p= ??? = ??? < trust level of 0.05,

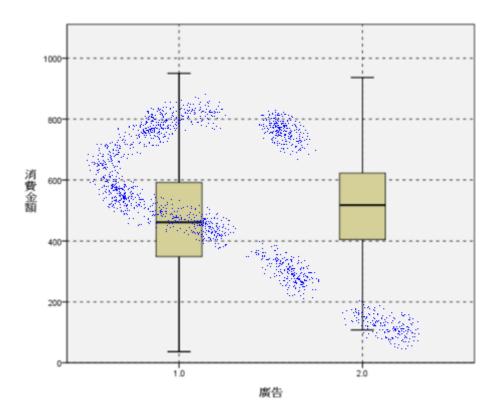
- → So in line with ??? Assumptions
- → ? ? Assumptions: Average sales amount, advertising ???
- > Advertising ???

(6). [Conclusion]:

- → Conclusion 1: Obvious Advertising??? The performance is greater than the advertisement???, the average sales amount is relatively high
- → Conclusion 2: Make a [recommendation form for A/B plan].

廣告設計種類	平均銷售金額	建議採用順序
廣告2	514.05	1
廣告1	467.77	2

(7). [Drawing]: Box diagram



(8). [Drawing]: Histogram

