AS3 (Assignment 3, Unit 5): Independent and Dependent t-tests on SPSS

Please write your answers in red ☺

Jones and Smith's advertising company wish to know if cartoons on cereal boxes cause children to attribute higher taste ratings to the cereal. The advertising company hires a psychologist to conduct a study before developing a sales plan for the cereal. The psychologist randomly selects 24 participants for a pilot study. She randomly assigns the sample so that 12 participants eat the cereal with the cartoon on the box while the other 12 participants eat the cereal without a cartoon on the box. All participants then rated the taste of the cereal. Here are the ratings:

Without Cartoon	With Cartoon
3	3
4	4
7	8
5	7
8	8
8	8
4	9
7	4
5	7
6	6
6	8
7	4

l. What is the researcher's hypothesis?

_____

_____

2. What is the null hypothesis?

_____

3. Exactly what mean differences are you comparing here?

_____
_____

4. What is the dependent variable? _____

5. What is the independent variable? _____

6. Please analyze the data with the appropriate hypothesis test on SPSS and cut and paste your SPSS results here:

Based on your SPSS results that you pasted above, please answer the following questions:

7. Please write your "statistical statement": _____

8. Did you reject or fail to reject the null hypothesis? _____

9. Please write your results in a "literature" or "research study" format:

_____
_____
_____
_____
_____
_____

A researcher hypothesizes that arousal levels will be affected by meditation. The sample participates in formal meditation classes for 3 weeks, before and after which arousal is measured.

Subject	BEFORE MEDITATION	AFTER MEDITATION
1	72	91
2	162	155
3	145	152
4	183	190
5	123	134
6	167	157
7	76	99
8	112	104
9	124	143
10	137	156

l. What is the researcher's hypothesis?

_____

2. What is the null hypothesis?

_____

3. What is the dependent variable? _____

4. What is the independent variable? _____

5. What is the appropriate hypothesis test?

_____

6. Please analyze the data using the appropriate hypothesis test on SPSS and cut and paste your SPSS results here:

7. Based on your SPSS results, do you reject or fail to reject the null?

_____

8. Please write the “statistical statement” for your SPSS results:

_____

9. Please write your results in a “literature” or “research study” format:

_____
_____
_____
_____
_____
_____
_____