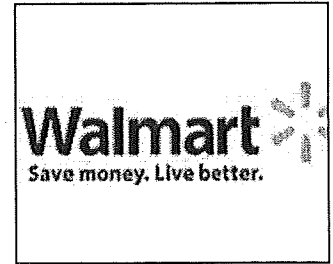


Logic in Advertising Project (25 points)

Objective: Explore logical reasoning as it applies to advertising slogans.

In this project, you will investigate the **logic** behind some advertising slogans. For example, what does the slogan "**Wal-Mart – Save money. Live Better**" mean? Does it mean that if you do not shop at Wal-Mart, you will not save money and have a better life? Is that what the advertisers would like you to think?



To analyze the **logic** of the slogan, first write it in *if-then* form. Also examine the inverse, converse, and contrapositive forms to help you reach conclusions about the product slogan.

The advertiser is hoping that you will accept the truth of their slogan and all of the conditionals associated with it.

Project Worth: 25 points

Your Task:

Part I (20 points)

- Attach a picture/drawing of slogan. Cite the source for the slogan. (2 pts)
- Copy the slogan in its original form. (2 pts)
- Write the slogan as a conditional statement in *if-then* form. (2 pts)
- Write the inverse, converse, and contrapositive of each statement. (2 pts each)
- Determine the truth value of each of the statements you have written. If a statement is false, give a **counterexample**. (2 pts each)

Part II (5 points)

Analyze the logic of the slogan you have chosen and all the conditionals associated with it. In your analysis, address the following (at least 3 sentences per paragraph):

- Paragraph 1: Tell how you or someone you know may be affected by the slogan. Does it catch your interest? Would you buy the product based only on the slogan? Explain why or why not.
- Paragraph 2: Suggest a way to improve the slogan to make it more appealing or more realistic. Explain your suggestion.
- Paragraph 3: Write a general summary describing what you learned about the use of logic in the advertising slogan you selected.

LOGIC IN ADVERTISING PROJECT

Name: _____

DUE: _____

SCORE: ____/25

Date: _____ Period: _____

Part I:

Original Slogan: _____

(Attach a picture/drawing of the slogan to the back of this sheet & cite your source for the image)

Conditional (Rewrite the original slogan in an if-then form): **If you shop at Walmart, then you will live better.**

Truth Value: **F** If false, provide a counterexample: **My friends would be more impressed by clothes from Hollister than from Walmart.**

Converse: _____

Truth Value: _____ If false, provide a counterexample: _____

Inverse: _____

Truth Value: _____ If false, provide a counterexample: _____

Contrapositive: _____

Truth Value: _____ If false, provide a counterexample: _____

Part II: Analysis

In your analysis, address the following (at least 3 sentences per paragraph):

- Paragraph 1: Tell how you or someone you know may be affected by the slogan. Does it catch your interest? Would you buy the product based only on the slogan? Explain why or why not.
- Paragraph 2: Suggest a way to improve the slogan to make it more appealing or more realistic. Explain your suggestion.
- Paragraph 3: Write a general summary describing what you learned about the use of logic in the advertising slogan you selected.

Paragraph 1: I would love to be able to save money and to live better!

However, I know that sometimes the quality of a product is higher if I spend more money. I have to be careful when I shop to make sure that saving money is worth it.

Paragraph 2: This slogan is not realistic because often I can live better when I spend more money. Yet I am worried about saving money for the future because our country is facing economic challenges. I would find the slogan "Spend less; save more" more appealing. If you spend less money, you will save more for the future.

Paragraph 3: This slogan can actually be better expressed using the Law of Syllogism. I have to assume that the first two conditional statements are true.

If you shop at Walmart, then you will save money.

If you save money, then you will live better.

Therefore, if you shop at Walmart, then you will live better.

The truth value of the each of the first two conditionals depends on individual preference!

1Q Project - Logic with Example Paragraphs.notebook

MYP Mathematics Assessment Criteria:

Your teacher will assess your project on the following criteria from the Middle Years Program (MYP) Mathematics Assessment Criteria.

	Knowledge and Understanding	Reflection in Mathematics
0	The student does not reach a standard described by any of the descriptors given below.	The student does not reach a standard described by any of the descriptors given below.
1	The student attempts to make deductions when solving simple problems in familiar contexts.	The student attempts to explain whether his or her results make sense in the context of the problem. The student attempts to describe the importance of his or her findings in connection to real life.
2		
3	The student sometimes makes appropriate deductions when solving simple and more-complex problems in familiar contexts.	The student correctly but briefly explains whether his or her results make sense in the context of the problem and describes the importance of his or her findings in connection to real life. The student attempts to justify the degree of accuracy of his or her results where appropriate.
4		
5	The student generally makes appropriate deductions when solving challenging problems in variety of familiar contexts.	The student critically explains whether his or her results make sense in the context of the problem and provides a detailed explanation of the importance of his or her findings in connection to real life. The student justifies the degree of accuracy of his or her results where appropriate. The student suggests improvements to the method when necessary.
6		
7	The student consistently makes appropriate deductions when solving challenging problems in variety of contexts including unfamiliar situations.	
8		