

SLO: I can identify, determine the truth value, and write statements, negations, conjunctions, and disjunctions.

😊😊😊😊 Today is a GREAT day to think mathematically! Let's get organized first. 😊😊😊😊


TABLE OF CONTENTS: **11/2 Statement, Negation, Conjunction, Disjunction**

NEW NOTEBOOK PAGE: **11/2 Statement, Negation, Conjunction, Disjunction**
SLO: I can identify, determine the truth value, and write statements, negations, conjunctions, & disjunctions.

Assignment Sheet: **11/2 CW: Statement, Negation, Conjunction, Disjunction Due 11/2**
11/2 HW: Statement, Negation, Conjunction, Disjunction Due 11/5

DO NOW SHEET: **Name, Date, Period,**
Copy and complete the statement: "Clear communication is important when _____"

LESSON: (Record all work in your notebook.)

 Notes (Copy into your notebook and draw a box around them)

Vocabulary:

Statement: Sentence that is true or false. →→→→→→→→ **Lee arrived late.**

Open Statement: Truth depends on variables. →→→→→→→→ **He arrived late.**




Negation: Has the opposite meaning of a statement. →→→→ **Lee did not arrive late.**

Conjunction: "and" statement. True when both parts are true. → **Lee arrived late and the film was sold out.**

Disjunction: "or" statement. True when 1 or both parts are true. → **Lee arrived late or the film started early.**

   (1) Watch the Monty Python clip "Argument Clinic"

- (a) Give an example of a statement and its negation from the video clip.
- (b) Did either man convince the other of his point?
- (c) To convince another person of your point of view, what do you need to provide?

   (2) Write the **negation** of each statement and its truth value in your notebook.

- (a) Neil Armstrong walked on the moon.
- (b) NECP starts at 8:30.
- (c) A duck is a mammal.
- (d) A carpenter works with wood.
- (e) NECP doesn't have a uniform policy.
- (f) Fish don't live in the water.

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(3) Write true or false for each conjunction based on the statements below:

A piano is a percussion instrument.
 A piano has 88 keys.
 A flute is a percussion instrument.
 A trumpet is a brass instrument.

- (a) A flute is a percussion instrument and a piano is a percussion instrument.
- (b) A flute is a percussion instrument and a trumpet is a brass instrument.
- (c) A piano has 88 keys and is a percussion instrument.
- (d) A piano has 88 keys and a trumpet is a brass instrument.
- (e) A piano is not a percussion instrument and a piano does not have 88 keys.
- (f) A trumpet is not a brass instrument and a piano is a percussion instrument.
- (g) A flute is not a percussion instrument and a trumpet is a brass instrument.
- (h) It is not true that a piano is a percussion instrument and has 88 keys.



(4) In your notebook, write true or false for each disjunction based on the statements below.

Let c represent "A gram is 100 centigrams."
 Let m represent "A gram is 1,000 milligrams."
 Let k represent "A kilogram is 1,000 grams."
 Let l represent "A gram is a measure of length."

- (a) A gram is 1,000 milligrams or a kilogram is 1,000 grams.
- (b) A gram is 100 centigrams or a gram is a measure of length.
- (c) A gram is 100 centigrams or 1,000 milligrams.
- (d) A kilogram is not 1,000 grams or a gram is not 100 centigrams.
- (e) A gram is a measure of length or a kilogram is 1,000 grams.



HOMEWORK: Problems under "Friday 11/2" on the homework sheet.



BACK OF DO NOW SHEET: Today my level of understanding is 😊 😐 😞 because _____



For the statements: (A) The earth is flat. (B) The sun rises in the east.

- 1) Write the negation of **A** and state its truth value.
- 2) Write the negation of **B** and state its truth value.
- 3) Write the conjunction of **A** and **B** and state its truth value.
- 4) Write the disjunction of **A** and **B** and state its truth value.

