#### **Introduction to Logical Reasoning** Workshop on (ategorical Statements and Basic Inferences

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# Find Your Group

# These are the groups (based on popular TV shows because everyone likes to watch TV):

Bab al-Hara

Maha Al-Moghany Angel Polacco

Desperate Housewives

Marie-Joe Khachan Marium Saeed

Glee

Penny Wang Aamena Ahmed Grey's Anatomy

Muneera Al-Buainain Jaimee Haddad

House, M.D.

Maha Al-Ansari Amna Elsaka

How I Met Your Mother

Ola Diab Saoud Faiadh

#### Modern Family

Sara Al-Thani Ridin Balakrishnan

Noor

Alanna Alexander Gena El Aker

The Walking Dead

Mohammed Hammouda Amit Chowdhury



#### Are you done with Parts I and II of the workshop?

(A) No.
(B) Yes.
(C) Yes!
(D) Yes!!
(E) Yes yes yes, already!

### Part I, Problems 1–3 Solutions

"All professors are successful".

- I. The subject (S) is professors.
- 2. The predicate (P) is successful people.
- 3. The Venn diagram for this statement:



### Part I, Problems 4–5 Solutions

4. The quality of this statement is *affirmative*, since it is telling us that a relationship holds between the subject and the predicate. This is seen because the diagram shows exactly where professors are found.

5. The quantity of this statement is *universal*, since it is telling us something about *all* professors. This is seen because the diagram tells use where *all* the professors are located.

## Part II, Problems 1–3 Solutions

"Some students are not journalism majors".

- **1.** The subject (S) is students.
- 2. The predicate (P) is journalism majors.
- 3. The Venn diagram for this statement:



### Part II, Problems 4–5 Solutions

4. The quality of this statement is *negative*, since it is telling us that a relationship does *not* hold between the subject and the predicate. The diagram shows exactly where students are *not* found.

5. The quantity of this statement is *particular*, since it is telling us something about *some* students. The diagram tells use where *some* students are located.

Question 2

#### Are you done with Parts III and IV of the workshop?

(A) No.
(B) Yes.
(C) Yes!
(D) Yes!!
(E) Yes yes yes, already!

## Part III, Problems 1–3 Solutions

- 1. The subject (S) is brilliant filmmakers.
- 2. The predicate (P) is self-reliant people.
- The Venn diagram for statement A: No brilliant filmmakers are self-reliant.



### Part III, Problem 4 Solution

The Venn diagram for statement B: Some brilliant filmmakers are not self-reliant.



#### If A is *true*, then B is *true* by **subalternation**.

### Part III, Problem 5 Solution

The Venn diagram for statement C: Some brilliant filmmakers are self-reliant.



If A is *true*, then C is *false* by being **contradictories**.

### Part III, Problem 6 Solution

The Venn diagram for statement D: All brilliant filmmakers are self-reliant.



If A is *false*, then D is *unknown* by being **contraries**.

## Part IV, Problems 1–3 Solutions

- **1.** The subject (S) is journalists.
- 2. The predicate (P) is mediocre hacks.
- 3. The Venn diagram for statement A: Some journalists are mediocre hacks.



### Part IV, Problem 4 Solution

The Venn diagram for statement B: No journalists are mediocre hacks.



#### If A is *true*, then B is *false* by being **contradictories**.

### Part IV, Problem 5 Solution

The Venn diagram for statement C: Some journalists are not mediocre hacks.



#### If A is *true*, then C is *unknown* by being **subcontraries**.

### Part IV, Problem 6 Solution

The Venn diagram for statement D: All journalists are mediocre hacks.



#### If A is *true*, then D is *false* by **subalteration**.

#### Quiz #9 Results

#### **Class Distribution**





# We will look at some further inferences that can be made from a single categorical statement.

Also, please don't forget to turn in your response to the Workshop #10 Questionnaire on your way out.