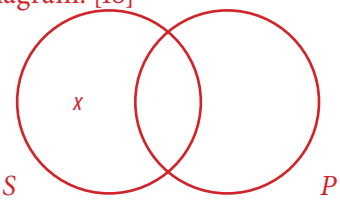
Introduction to Logical Reasoning

Workshop #9: Analyzing Categorical Statements (Solutions)

Part I: Each of the following problems presents a categorical statement. For each, (1) state the subject term (*S*) and predicate term (*P*); (2) identify its logical form; (3) draw the Venn diagram representing it, being sure to label the parts; and (4) explain its quality, quantity, and distribution. These statements should be fairly straightforward.

1. Some students are not journalism majors.

Subject (*S*): Students. [2]
Predicate (*P*): Journalism majors. [2]
Logical Form: (**O**) Some *S* is not *P*. [2]
Venn Diagram: [10]



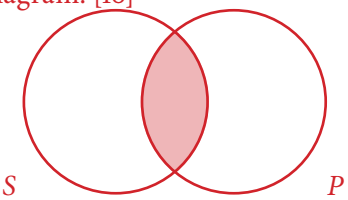
Students Journalism Majors

Quantity: Particular because it is referring to *some* students but not necessarily to all of them. Some students are not journalism majors, but some may be, as is seen in the Venn diagram. [3]
Quality: Negative because it *denies* that there are no students that are also not journalism majors. [3]
Distribution: The predicate term *is* distributed because the statement refers to *all* of the journalism majors. As the Venn diagram shows, all journalism majors are not that one student marked with an *x*. [3]

Following directions [1]. No other mistakes [1].

2. No brilliant filmmakers are self-reliant.

Subject (*S*): Brilliant filmmakers. [2]
Predicate (*P*): People who are self-reliant. [2]
Logical Form: (**E**) No *S* is *P*. [2]
Venn Diagram: [10]



Brilliant Filmmakers People Who are Self-Reliant

Quantity: Universal because it is referring to *all* brilliant filmmakers. They are all not people who are self-reliant, as is seen in the Venn diagram. [3]
Quality: Negative because it *denies* that brilliant filmmakers are also people who are self-reliant. [3]
Distribution: The predicate term *is* distributed because the statement refers to *all* of the people who are self-reliant. As the Venn diagram shows, they are all not filmmakers. [3]

Following directions [1]. No other mistakes [1].

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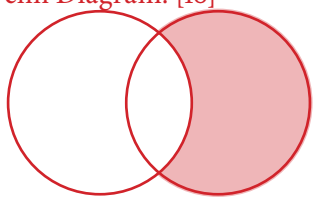
Workshop #9: Analyzing Categorical Statements (Solutions)

Part II: Each of the following problems presents a categorical statement. For each, (1) state the subject term (*S*) and predicate term (*P*); (2) identify its logical form; and (3) draw the Venn diagram representing it, being sure to label the parts. Some of these statements may require a little more thought.

1. People who speak truth to power are the only good journalists.

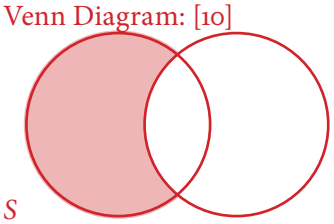
Subject (*S*): People who speak truth to power. [2]
Predicate (*P*): Good journalists. [2]
Logical Form: (**A**) All *P* is *S*. [2]
Venn Diagram: [10]



Following directions [1]. No other mistakes [1].

2. People who speak truth to power are only good journalists.

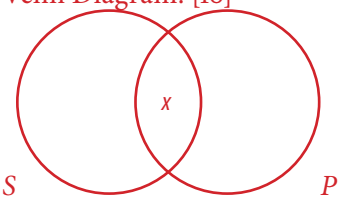
Subject (*S*): People who speak truth to power. [2]
Predicate (*P*): Good journalists. [2]
Logical Form: (**A**) All *S* is *P*. [2]
Venn Diagram: [10]



Following directions [1]. No other mistakes [1].

3. There are Eskimos who have spent time in the desert.

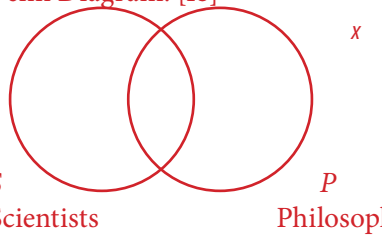
Subject (*S*): Eskimos. [2]
Predicate (*P*): People who have spent time in the desert. [2]
Logical Form: (**I**) Some *S* is *P*. [2]
Venn Diagram: [10]



Following directions [1]. No other mistakes [1].

4. Some non-scientists are non-philosophers.

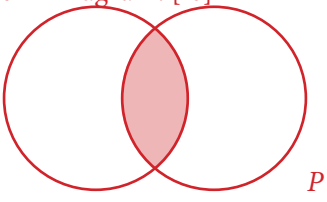
Subject (*S*): Scientists. [2]
Predicate (*P*): Philosophers. [2]
Logical Form: (**I**) Some non-*S* is non-*P*. [2]
Venn Diagram: [10]



Following directions [1]. No other mistakes [1].

5. Hafsa does not like *The Lord of the Rings*.

Subject (*S*): People identical to Hafsa. [2]
Predicate (*P*): People who like *The Lord of the Rings*. [2]
Logical Form: (**E**) No *S* is *P*. [2]
Venn Diagram: [10]



Following directions [1]. No other mistakes [1].