Junior/Senior Divisions Expansion of Non Sequitur Technique

One or more tournament examples for Section **E** will include forms of reasoning. If the reasoning is correct, the Panel's Answer will be No Technique. If the reasoning is fallacious, the answer will be Non Sequitur.

Examples will be based on the following **correct** forms of reasoning. In other words, if the example fits one of these four patterns, the answer is No Technique.

Correct Form of Reasoning	Example
I. Rule of Detachment If p , then q p Therefore, q	If I study Propaganda techniques, then I get a headache. I've been studying Propaganda. I have a headache.
II. Law of Contrapositive If p , then q not q Therefore, not p	If you are a parent, then you have children. You have no children. Therefore, you are not a parent.
III. Disjunctive Syllogism p or q p or q not p not q Therefore, q Therefore, p	Either you complete the last assignment or you fail the course. You didn't complete the last assignment. Therefore, you fail the course.
IV. Hypothetical Syllogism If p , then q If q , then r Therefore, if p , then r	Persistence leads to success. Success leads to wealth and power. So if I am persistent, I will obtain wealth and power.

Each of the four forms of reasoning can take alternate forms, as explained on the following pages.

NOTE: The following form of **incorrect** reasoning is covered by the Faulty Analogy technique of Section E, not Non Sequitur.

Faulty Analogy Fallacy	Example
A is C. B is C. Therefore, B is A.	All squares are quadrilaterals. All parallelograms are quadrilaterals. Therefore, all parallelograms are squares.
Alternate version: If A, then C. If B, then C. Therefore, if A, then B [or if B, then A].	If you like rap music, you like hip-hop. If you like G-funk music, you like hip-hop. So if you like rock music, you like G-funk music.

I. Rule of Detachment

Also known as "modus ponens."

A. General Form

If p, then q

p

Therefore, q

B. Example

If the Steelers win Sunday, they win their division.

The Steelers won Sunday.

So they win their division.

p = "The Steelers win Sunday."

q = "They win their division."

C. Alternate forms

"If p, then q," can also be stated these ways. (These are the *only* alternate forms that will appear in Propaganda tournament examples.)

1. *q* if *p*

Example: The Steelers win their division if they win Sunday.

2. p leads to/yields/gives q ($p \rightarrow q$)

Example: Hard work leads to success.

3. *p* is sufficient/enough for *q*

Example: An 85 on the final exam is high enough (sufficient) for you to make an A for the semester.

4. All/every p is q

Example: All squares are rectangles. Alternate: Every square is a rectangle.

5. *p* only if *q*

Example: I'll stay home tomorrow only if I'm sick

The statement "p only if q" can be translated in either of two equivalent ways:

- **a.** If p, then q.
- **b.** If not q, then not p.

The first translation sounds more natural in some contexts, and the second in others. But because they are contrapositives, they are logically equivalent.

D. Additional examples of correct reasoning with explanations

1. Parole officer to Jack, who has just been released from prison: "Obey the rules listed on this card, and I'll write a good report on you each month."

Meeting with Jack a month later, the parole officer says, "So far, you've followed the rules I gave you. So I'm giving you a good report."

Translation to standard Rule of Detachment format:

If you obey the rules on this card, then you'll get a good monthly report.

You followed the rules.

Therefore, you get a good report.

2	Comparid he would stay home from school today only if he's sick
۷.	Sam said he would stay home from school today only if he's sick. He's not here. So he must be sick.
	Translate this example to "classic" Rule of Detachment form like this: If <u>Sam stays home from school</u> , then <u>he is sick</u> .
	Sam is not at school.
	Therefore, Sam must be sick.
Fa	Ilacy Associated with the Rule of Detachment
Αi	fallacy is an invalid argument in which the premises do not lead to the conclusion.
De	enying the Antecedent Fallacy
	a statement of the form If p , then q , p is called the antecedent and q is called the ensequent .
Ge	eneral Form of the Fallacy
-	o, then q
no Th	erefore, not g
	cample of the Fallacy
Th	he Steelers win Sunday, they win their Division. le Steelers didn't win Sunday. lerefore, they didn't win their division.
Ex ab	planation: The first premise says what happens if the Steelers win. It says nothing out what happens if the Steelers lose. They might still win the Division if the secdiplace team loses also.
PR	RACTICE EXERCISES
1.	Announcer at the start of the final game of the basketball playoffs: "If James Curry scores just 8 points tonight, he sets a new record for points in the final series." After a Curry basket in the second quarter, the announcer says, "That gives Curry 9 points and a new record."
	Translation:
	If, then
	Is the reasoning valid?
2.	Hispanic judges are prejudiced against me. The judge in the lawsuit against my online university is Hispanic. There's no way she treats me fairly.

E.

Rule of Detachment - 3

	If, then
	Is the reasoning valid?
3.	An even number bigger than two can't be a prime number. 37 is an odd number. So 37 is prime.
	If, then
	Is the reasoning valid?
4.	Captain to her teammates right before the Presidents tournament: "The only way we lose is if we make too many foolish guesses on six point clues." After the team finishes third in the tournament, the captain tells the team, "You didn't listen to what I told you. We guessed wrong on the six point clue too many times."
	Translation:
	If, then
	Is the reasoning valid?

Your Notes for Rule of Detachment

Answers to Completions

1. Announcer at the start of the final game of the basketball playoffs: "If ry scores just 8 points tonight, he sets a new record for points in the After a Curry basket in the second quarter, the announcer says, "That ry 9 points and a new record."		
	Translation:	
	If <u>Curry scores 8</u> , then <u>he sets new record</u> .	
	Curry scored 9.	
	He set new record.	
	Is the reasoning valid? <u>Yes</u>	
2.	Hispanic judges are prejudiced against me. The judge in the lawsuit against my online university is Hispanic. There's no way she treats me fairly.	
	Translation:	
	If the judge is Hispanic, then the judge is prejudiced against me.	
	The judge in the lawsuit is Hispanic.	
	The judge is prejudiced against me.	
	Is the reasoning valid? <u>Yes</u>	
3.	An even number bigger than two can't be a prime number. 37 is an odd number. So 37 is prime.	
	If it is an even number bigger than two, then it is not a prime number.	
	37 is not an even number bigger than two.	
	37 is a prime number.	
	Is the reasoning valid? No	
4.	Captain to her teammates right before the Presidents tournament: "The only wa we lose is if we make too many foolish guesses on six point clues." After the team finishes third in the tournament, the captain tells the team, "You didn't listen to what I told you. We guessed wrong on the six point clue too many times."	
	Translation:	
	If <u>we make too many foolish 6-point guesses</u> , then <u>we lose</u> .	
	We guessed wrong on 6-pointers too many times.	
	We lost.	
	Is the reasoning valid? Yes	