Paradigm Test Prep

LSAT Conditional Logic Guide

LSAT Conditional Logic Guide
Mastering Conditional Reasoning for the LSAT

Part 1: The Basics

A conditional statement links a trigger (sufficient) condition to a result condition (necessary). Use language to recognize and properly identify the conditions:

Sufficient Condition Indicators	Necessary Condition Indicators
if	then
when	only
whenever	only if
all / every / any	must / necessary / needed
in order to	depends on / requires / relies on
people who	unless / except / until / without
guarantees / ensures	
the only	
no / none	

Part 2: Diagramming Conditional Statements

To keep track of conditional statements, we use simple diagramming.

Format

A → B

A = sufficient condition (right of the arrow)
B = necessary condition (left of the arrow)

Use arrows (→) and a tilde (~) for negation.

Examples:

If it rains → The ground gets wet
Rain, therefore wet ground

If you're in Paris → You're in France
Paris, therefore France

Part 3: Valid & Invalid Inferences

Valid Inferences

1. Repeat Form

If A → B, and A happens → B must also happen.

Example:

If someone wins the lottery → they bought a ticket.
You win the lottery, therefore you bought a ticket ✔️

2. Contrapositive

Reverse + Negate both sides:

• If A → B, then ~B → ~A

• You didn't buy a lottery ticket, therefore you didn't win.

Diagram:

A → B

~B → ~A

Invalid Inferences

1. Mistaken Reversal

Just flipping the order.

• If A → B, don't assume B → A

Example: If it rains → the ground is wet.
Doesn't mean: The ground is wet, therefore it rained ✗

2. Mistaken Negation

Just negating both parts.

• If A → B, don't assume ~A → ~B

Example: If I'm in Paris → I'm in France. Doesn't mean:
I'm not in Paris, therefore I'm not in France ✗

Part 4: Linking & Chains

Sometimes you're given multiple conditional statements. You can chain them together if the conditions line up diagonally.

Conditional Chains

A → B
B → C
_____

You can infer A → C
Contrapositive: ~C → ~A

Example

If you study → you learn the material

If you learn the material → you pass
_____

Therefore, If you study → you pass

Protip: When diagramming for inference questions, try to combine conditional statements to draw conclusions. Those conclusions will be your prediction for correct answer. But don't stop there! Once you have a conclusion, take the contrapositive because the correct answer choice could show up in that format.

Part 5: Special Phrases and How to Diagram Them

On the LSAT, certain phrases determine whether a term is treated as a *sufficient* or *necessary* condition. Understanding these will help you diagram statements correctly and avoid common mistakes.

■ 'Only' / 'Only If' / 'The Only'

Only / Only If: Introduces the *necessary* condition.
Example: A+ only if you study.
Diagram: A+ → Study.

The Only (when starting a sentence): Introduces the *sufficient* condition.
Example: The only person who can prescribe medicine is a doctor.
Diagram: Prescribe Med → Doctor

■ 'No' / 'None'

These statements negate the necessary condition.

Example: No dogs are cats.
Diagram: Dog → ~Cat

■ 'Unless' / 'Except' / 'Until' / 'Without'

Replace these terms with **"if not,"** meaning they introduce the *sufficient condition negated*.

Example: You trip unless watch where you are walking.
Translation: If you *don't* watch where you walk → You will trip.
Diagram: ~Watch where walk → Trip

■ Double Arrow Indicators

The following phrases indicate that both conditions require each other:
- If but only if
- Then and only then
- When and only when

Example: You get into law school if and only if you apply.
Diagram: Law School ↔ apply

Part 6: Multiple Conditions

Sometimes, conditional statements involve multiple sufficient or multiple necessary conditions. It's important to carefully track whether these conditions are connected by AND or by OR. When taking the **contrapositive** of a conditional statement with multiple conditions, there is a **third step**: switch *and* for *or* / *or* for *and*.

■ Multiple Sufficient Conditions (OR)

If *either* of two or more conditions is enough to guarantee the outcome, use OR when diagramming.

Example: If you give me a treat or take me for a walk, I will wag my tail.
Diagram: Treat OR Walk → Wag tail

■ Multiple Sufficient Conditions (AND)

One condition is NOT enough to guarantee the outcome. Having both condition will guarantee trigger the necessary result. Use AND when diagramming.

Example: If you know the lyrics and hit the high notes, you'll do well at karaoke.
Diagram: Know lyrics and Hit high notes → Do well karaoke

■ Multiple Necessary Conditions (OR)

The sufficient condition guarantees the outcome of at least one of the necessary conditions, maybe both.

Example: If you're functioning before 8am, you drank coffee or got enough sleep
Diagram: Functioning before 8am → Drank coffee or Got sleep

■ Multiple Necessary Conditions (AND)

If all conditions must be true for the outcome to happen, connect them with AND when diagramming.

Example: To unlock level 10, you must beat the boss and survive the lava maze
Diagram: Level 10 → Beat boss AND Survive maze

■ Mixed Conditions

Sometimes, you'll have both AND and OR conditions combined. Always focus on what conditions must be met to trigger the result.

Example: If you take the LSAT and have strong letters of recommendation or a high GPA → You improve your admissions chances.
Diagram: LSAT AND (LOR OR High GPA) → Better Chances

■ Taking the Contrapositive with Multiple Conditions

When creating contrapositives, remember these rules:
- Reverse the order of the terms
- Negate each term
- Switch AND ↔ OR

Example 1: Good cake → Follow Recipe AND ~ Burn it
Contrapositive: Burn it OR ~Follow Recipe → ~Good Cake

Example 2: Study flash cards OR Review notes → Remember material
Contrapositive: ~Remember material → ~Study flash cards AND ~Review notes

Part 7: On the LSAT

■ Must Be True Questions

Look for the repeated terms across multiple conditional statements in the stimulus that allow you to link or chain the statements. Sometimes, taking the contrapositive is required. Be suspicious of *mistaken reversals* and *mistaken negations*; they will appear in your answer choices. These questions often reward precision and require recognizing valid vs. invalid inferences.

■ Assumption Questions

Use this structure to understand assumption-based reasoning:

Evidence: A → B
Assumption: [find the missing connection = B → C]

_____

Conclusion: A → C

Protip: The repeating variable between the evidence and the conclusion ("A") will **NOT** be included in your assumption. Instead, your assumption connects the *new variable* in the conclusion ("C") to the *unmatched variable* in the evidence ("B").

Part 8: Final Tips

✓ Memorize indicator words

✓ Create a contrapositive of your prediction for correct answer

✓ Translate "unless" with "if not"

✓ Don't trust your instincts — trust the logic

Need More Help? Schedule A FREE 15-minute consultation today: