

Student Notes Sheet — Lesson 2.3 Day 2

Name: _____ Period: _____ Date: _____

Name	Symbolic Form	Example	Connection to 4 Conditional Forms
Law of Detachment ✓	$p \rightarrow q$ p $\therefore q$		
Denying the Consequent ✓	$p \rightarrow q$ $\sim q$ $\therefore \sim p$		
Affirming the Consequent ✗ (Fallacy)	$p \rightarrow q$ q $\therefore p$ ✗		
Denying the Antecedent ✗ (Fallacy)	$p \rightarrow q$ $\sim p$ $\therefore \sim q$ ✗		
Undistributed Middle ✗ (Fallacy)	All A are C. All B are C. $\therefore A = B$ ✗		

Key Definitions — fill in after class discussion

Valid:

Sound:

Invalid:

Fallacy:

ID	Premises	Conclusion	Structure	Valid/Sound/Invalid
A	P1: All cats are mammals. P2: Felix is a cat.	Felix is a mammal.		
B	P1: All dogs are animals. P2: All cats are animals.	Therefore, all cats are dogs.		
C	P1: If it rains, the ground gets wet. P2: It is raining.	The ground is wet.		
D	P1: If I eat broccoli, I'll be healthy. P2: I am healthy.	I must have eaten broccoli.		
E	P1: All humans are mortal. P2: Socrates is mortal.	Therefore, Socrates is a human.		
F	P1: All unicorns have horns. P2: Steve is a unicorn.	Steve has a horn.		
G	P1: If aliens exist, then Area 51 is hiding them. P2: Aliens exist.	Therefore, Area 51 is hiding them.		
H	P1: If the moon is made of cheese, then it tastes delicious. P2: The moon is made of cheese.	Therefore, it tastes delicious.		
I	P1: All Martians wear hats. P2: Fred is a Martian.	Fred wears a hat.		