

6. Aristotelian Logic The Categorical Syllogism: Mood & Figure

A. For each of the following forms, state the mood and figure.

	<u>Form</u>	<u>Mood</u>	<u>Figure</u>	<u>Validity</u>
1	$\frac{Epm}{\frac{Asm}{\square Esp}}$	EAE	2	Valid
2	$\frac{Emp}{\frac{Ams}{\square Osp}}$	EAO	3	Valid
3	$\frac{Emp}{\frac{Ems}{\square Esp}}$	EEE	3	Invalid
4	$\frac{Imp}{\frac{ImS}{\square Isp}}$	III	3	Invalid
5	$\frac{Apm}{\frac{Asm}{\square Isp}}$	AAI	2	Invalid
6	$\frac{Opm}{\frac{Asm}{\square Esp}}$	OAE	2	Invalid
7	$\frac{Opm}{\frac{Asm}{\square Osp}}$	OAO	2	Invalid
8	$\frac{Amp}{\frac{Oms}{\square Osp}}$	AOO	3	Invalid
9	$\frac{Apm}{\frac{Ems}{\square Esp}}$	AEE	—	

10	$\frac{Epm}{Ism}$ □ Esp	EIE	2	Invalid
11	$\frac{Asm}{Amp}$ □ Ips	AAI	—	
12	$\frac{Apm}{Ams}$ □ Isp	AAI	—	
13	$\frac{Amp}{Asm}$ □ Esp	AAE	1	Invalid
14	$\frac{Amp}{Ism}$ □ Isp	AII	1	Valid
15	$\frac{Apm}{Osm}$ □ Osp	AOO	2	Valid
16	$\frac{Amp}{Oms}$ □ Osp	AOO	3	Invalid
17	$\frac{Omp}{Ams}$ □ Osp	OAO	3	Valid
18	$\frac{Opm}{Asm}$ □ Osp	OAO	2	Invalid

B. For each of the following arguments, state the mood and figure and then determine whether it is valid. If so, state the form name; if not, state what rule it violates.

	Problem	Symbol-ization	Mood & Figure; Validity
1.	All wars waged by legitimate authority in a just cause and with a right intention are just wars. The US war against Japan was a war waged by legitimate authority in a just cause and with a right intention. So, the US war against Japan was a just war.	$\frac{Awj}{Auw}$ <input type="checkbox"/> Auj	AAA-1 Valid
2.	No attacks on civilian populations are justifiable military operations. Some American military operations were attacks on civilian populations. So some American military operations were not justifiable military operations.	$\frac{Eaj}{Ima}$ <input type="checkbox"/> Omj	EIO-1 Valid
3.	All virtuous human beings have good judgment. Some of my roommates friends do not have good judgment. So, some of my roommates friends are not virtuous human beings.	$\frac{Avj}{Orj}$ <input type="checkbox"/> Orv	AOO-2 Valid
4.	All virtuous people have the virtue of moderation. No one who deliberately gets drunk has the virtue of moderation. So, no one who deliberately gets drunk is a virtuous person.	$\frac{Avm}{Edm}$ <input type="checkbox"/> Edv	AEE-2 Valid
5.	Anyone who knows who King Zog is has a good command of Albanian history. And anyone who knows who King Zog is a person I want to hang out with. So, some people I want to hang out with are people who have a good command of Albanian history.	$\frac{Aza}{Azp}$ <input type="checkbox"/> Ipa	AAI-3 Valid
6.	All Martians are inhabitants of other planets. Some Martians are not intelligent. So, some intelligent beings are not inhabitants of other planets.	$\frac{Amp}{Omi}$ <input type="checkbox"/> Oip	AOO-3 Invalid
7.	All Martians are inhabitants of other planets. No Martians are six-legged. So, no six-legged beings are inhabitants of other planets.	$\frac{Amp}{Ems}$ <input type="checkbox"/> Esp	AAE-3 Invalid

8.	All persons are capable of reasoning, but no non-human animals are capable of reasoning. So, no non-human animals are persons.	<u>Ap</u> c <u>En</u> c <input type="checkbox"/> Enp	AEE-2 Valid
9.	Anyone who corrupts the youth of his own city harms himself. Socrates does not harm himself. So, Socrates does not corrupt the youth of his own city.	<u>Ach</u> <u>Esh</u> <input type="checkbox"/> Esc	AEE-2 Valid
10.	No herbivores have sharp teeth and no cows have sharp teeth. So, all cows are herbivores.	<u>Eh</u> s <u>Ecs</u> <input type="checkbox"/> Ach	EEA-2 Invalid
11.	Any unwillingness to live with the decisions of a city in which we choose to dwell would be a refusal to fulfill an agreement we have made. Socrates' attempt to escape would be an unwillingness to live with the decisions of a city in which he chose to dwell. Socrates' attempt to escape would be a refusal to fulfill an agreement he has made.	<u>Aur</u> <u>Aeu</u> <input type="checkbox"/> Aer	AAA-1 Valid
12.	No one who commits a crime without deliberation would be deterred by the prospect of capital punishment. Some murderers commit their crimes without deliberation. So, some murderers will not be deterred by the prospect of capital punishment.	<u>Ecd</u> <u>Im</u> c <input type="checkbox"/> Omd	EIO-1 Valid
13.	No naturalized citizen is eligible for the Presidency. But no one born in the United States is a naturalized citizen, so everyone born in the United States is eligible for the Presidency.	<u>En</u> e <u>Eun</u> <input type="checkbox"/> Aue	EEA-1 Invalid
14.	No Socialists are Senators. All Senators are members of Congress. So no Socialists are members of Congress.	<u>An</u> m <u>Ecn</u> <u>Ecm</u>	AEE-1 Invalid
15.	All poisons are bitter. Arsenic is not bitter. Therefore, arsenic is not a poison.	<u>Ap</u> b <u>Eab</u> <input type="checkbox"/> Eap	AEE-2 Valid
16.	Anyone who eats meat is in no position to object to hunting. And you eat meat, so you are in no position to object to hunting.	<u>Aen</u> <u>Aue</u> <input type="checkbox"/> Aun	AAA-1 Valid
17.	No naturalized citizen is eligible for the Presidency. And Henry Kissinger is a naturalized citizen. So, he is not eligible for the Presidency.	<u>En</u> e <u>Akn</u> <u>Eke</u>	EAE-1 Valid

18.	Any girl who goes out with John needs to have her head examined. Mary goes out with John. So, Mary needs to have her head examined.	Agh <u>Amg</u> <input type="checkbox"/> Amh	AAA-1 Valid
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