



Questions 1-8

Setup:

o at least four clowns selected from seven: M N O P R S V

Conditions: #1: 2 of R, S, and V are selected #2: either N or O must be selected #3: O → R; ~R → ~O (contrapositive) #4: P → S; ~S → ~P (contrapositive) #5: M → ~N; N → ~M (contrapositive)



		#	#1		#2		#3		#4	
In	Out	In	Out	In	Out	In	Out		In	Out
	M/N	R	N/M	R	V/S	S	Μ		R	Μ
	R/S/V	S	V	S/V	N/M	R/V	V/R		S	Ν
		M/N		M/N	Р	Ν	0		0	V
		Ο		Ο		Р			Р	
		Р								

Overview:

The setup and conditions allow us to infer quite a bit. The first and fifth conditions tell us that we must have at least two out: at least one of M and N and one of R, S, and V. We therefore know that the maximum number of clowns selected is 5.

¹ Visit Manhattan LSAT (<u>http://www.manhattanlsat.com</u>) to learn more about using this diagram.

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Circus Game

- **Mold #1:** If 5 are selected, both O and P must be among them, due to the fifth condition. Applying the third and fourth conditions, R and S must also be selected.
- **Mold #2:** If 3 clowns are not selected, and P is one of them, O has to be selected. Due to the third condition, R must also be selected.
- **Mold #3:** If 3 clowns are not selected, and O is one of them, P has to be selected. With O out, N has to be in (contrapositive of the second condition). Due to the fourth condition, we also know that S is selected.
- **Mold #4:** If the third clown that is not selected is either M or N, we know that both M and N are out. O and P therefore must be selected, triggering the third and fourth conditions, and we know that R and S are also selected, and V is not selected.

These four molds represent the nine possible solutions to the game.

- 1. (A) S could only be out under mold #2. According to the mold, O must be selected, and A is correct.
- 2. (E) Checking the answer choices against the mold #1 reveals that P must be selected, and choice E is therefore correct.
- 3. (C) This draws us to mold #3, and we know that S is selected.
- 4. (C) This could only be true of mold #2, and C is the only possibility among the choices.
- 5. (B) Looking at the third mold, we know that P must be selected.
- 6. Check the choices against the conditions:
 - (A) Correct
 - (B) violates the third condition
 - (C) violates the fifth condition
 - (D) violates the second condition
 - (E) violates the fourth condition
- 7. **(D)** Choice E is not possible, since we can't have 4 out. Since all four of the other choices have 2 out, we can check them against mold #1. Only choice D is possible.
- 8. We can check the choices against the molds:
 - (A) see mold #4
 - (B) see mold #3
 - (C) see mold #2
 - (D) Correct
 - (E) see mold #2