

Syllogism Shortcuts - Systematic Method to Solve Questions

Today I am going to share a systematic method to solve Syllogism questions. In every competitive exam, you will see at least 4-5 questions from this chapter.

I will start with explaining basic syllogism terminology which will be followed by practical examples.

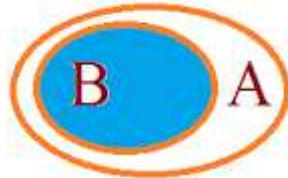
All

1) All A is B



(1)

2) All B is A



(2)

Some

1) Some A is B



(1)

2) Some B is A



(2)

NO

No A is B



Case # All - Some



Let!

You have 1000 \$ in your pocket. One of your friend needs 600 \$ to pay his Bill. He wants to borrow money from you. He comes to you and say, "Do you have 600 \$?. What would you say," "Afcoss Yes!". Even if He ask for 1 \$, or 999 \$. Your answer will always "Yes!".

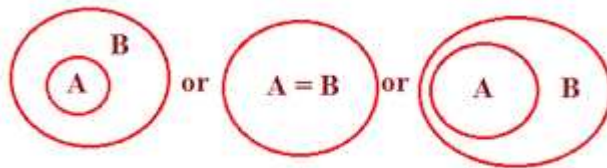
So Overall you had 1000 \$ which is called "All " or All of the money you had & What is your friend want some of the money like here 600 or it could be 1\$ or 999 \$ and what we call that some portion of money out of it. or "Some".

That's why In " All " Case, "Some" is always true.

Example:

Statement : All A are B.

Possible Diagram



Conclusion

All A are B ✓

Some A are B ✓

Some B are A ✓

Some A are not B ✗

Some B are not A ✗

Statement : All A is B.

Conclusion

- Some A is B ✓
- Some B is A. ✓
- All B is A ✗



Let

$$B = \{ 1, 2, 3, 4, 5, 6, 7, 8 \}$$

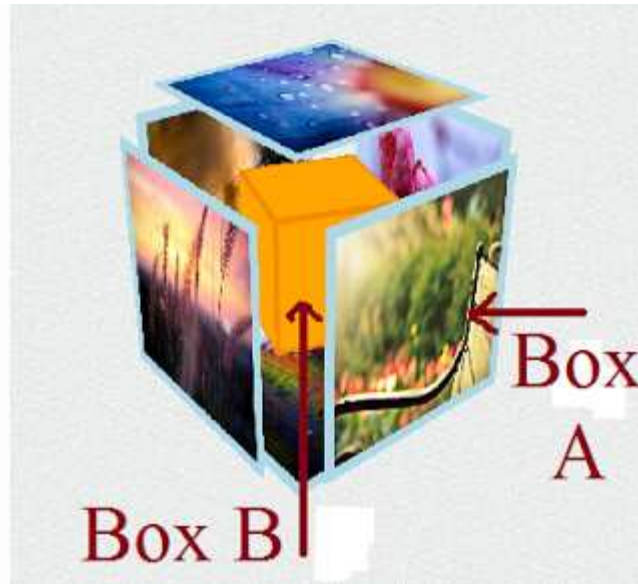
$$A = \{ 4, 5, 6, 7 \}$$

Now Here we can see that A contains set of numbers. So we call it is as Set A and Same for B 'Set B'.

All the numbers in A is contained by B hence All A is B true But All the numbers in B is not in A or not contain by A so All B is A \rightarrow False.

Now Let understand How All A is B \rightarrow True But All B is A \rightarrow False

Let Box A & Box B . Here We can see that Box B is inside the Box A Hence Box B can fit into Box A but Box A cannot fit into Box B.



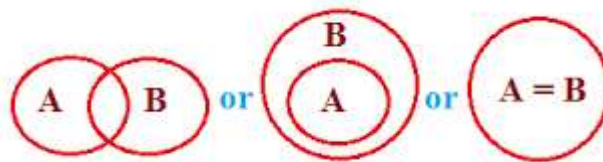
Case # Some - Some Not



Assume you have given the exam & you passed with some marks that mean you got some marks and some or not. Even if you passed the exam with 99% marks still you missed the 1%. So Even 99% is count under the same case.and 1% is also counted in some case.hence In 'Some' case 'Some Not' is true.

Statement : Some A are B

Possible Diagram



Conclusion

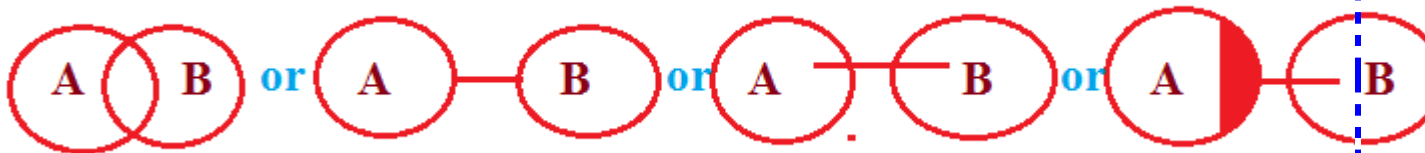
All B are A ✗

Some B are A ✓

No A is B ✗

Statement : Some A are not B

Possible Diagram



Statement : Some A is B

Conclusion

Some A is not B ✓

Some B is A ✓

Some B is not A ✓



Explanation

1) Some A is not B



2) Some B is A



3) Some B is not A



Let

$$B = \{ 1, 2, 3, 4, 5, 6, 7, 8 \}$$

$$A = \{ 4, 5, 6, 7, 8, 9, 10, 11 \}$$

Here we see that Set A & Set B has some common values hence we can say that Some A is B & Some B is A But there also some values which are not common in both A & B. So We can also say that Some A are not B & Some B are not A.

Case # No- Some Not



"I'm sorry, son, but I'm not in the bad debt business anymore."

Assume You have no money in your pocket. So if you got no money. It means also that some money is not in your pocket. Having No means also some not.

	Identifier	Subject	Predicate	
	Statement		Conversion	Accuracy
Universal Statement	<u>All</u> A are B	A	Some	True
	Some A are B		Some	True
Particular Statement	<u>No</u> A is B		No, Some not	True
	Some A are not B		No conversion	True

Point to Remember while Solving Syllogism

- Anything is possible in a statement.
- Some pens are fans. No fan is heater
- Negative Answer will never be there.

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Simple Case

Statement	Conclusion
Some	All , No , [False] Some,Some Not [True]

All	No , Some Not [False] Some , All [True]
Some Not	Only Statement [True]
No	Some , All [False] No , Some Not [True]

Possibility

Statement	Conclusion
Some	No , Some [False] All , Some Not [True]
All	x
No	x
Some Not	Some Not , All [False] Some , No [True]

Some Examples

Example 1

Statement : Some A are B, Some B are C , All C are D



Conclusion

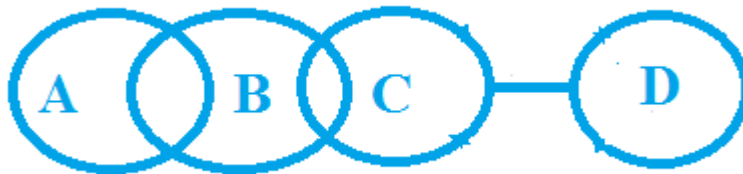
Some A are not D ✘

Some B are D ✓

Some A are C ✘

Example 2

Statement: Some A are B, Some B are C, No C is D



Conclusion

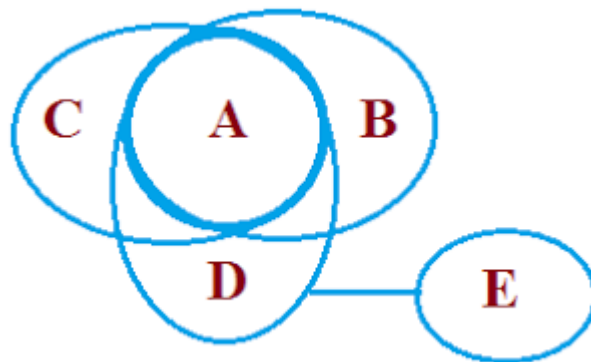
Some B are not D ✘

Some D are not B ✗

Some A are C ✗

Example 3

Statement: All A are B , All A are C , All A are D , No D is E



Conclusion:

Some B are not E ✓

Some A are not E ✓

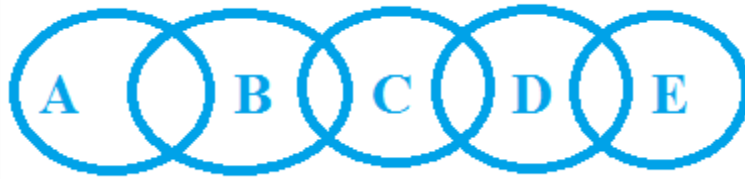
No C is E ✓

No A is E ✓

No E is A ✓

Example 4

Statement: Some A are B , Some B are C , Some C are D , Some D are E



Conclusion :

Some C are not A ✘

Some B are not D ✘

Some A are E ✘

All B are D ✘

No A is E ✘

Some C are A ✘

All B are E ✘

No B is E ✘

' Either Or ' & ' Neither Nor '

Complementary Pair

1. If One Conclusion is positive & One is Negative

No - Some

Some - Some Not

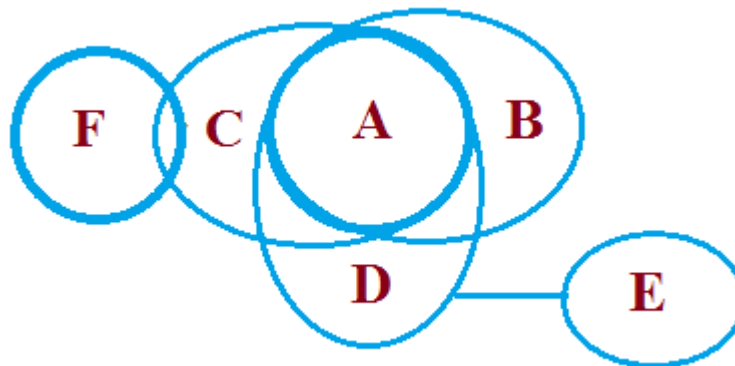
All - Some Not

2. Same Subject & Same Predicate are there
3. & not able to draw both the conclusion then answer will be Either Or

Example

Example 1

Statement : All A are B , All A are C , All A are D , No D is E, Some F is C



Conclusion :-

Some D are not E ✓
Some A are not E ✓
No C is E ✓
No A is E ✓
No E is A ✓
No E is C ✓
Some F is not E ✓
No E is F ✗
All F being C
is a possibility ✗



Example 2

Statement : Some A are B, Some B are C, Some C are D, Some D are E



Conclusion :

Some B are not D ✘
Some C are A ✘
Some A are not E ✘
All A are E ✘
Some B is D ✘
No C is A ✘
All A are D ✘
No A is D ✘

Note: 
Either 
Or

Exception

1. In case of Universal (like 'All & No') Conclusion Complementary pair does not work
2. In this type of Question " Neither Nor "

Example 3

Statement: Some A are B, All B are C, No C is D



Conclusion :

Some A are not D ✘

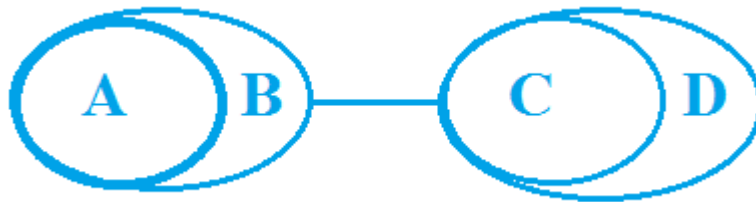
No B is D ✘

Some A are C ✘

Some D are B ✘

Example 4

Statement: All A are B, No B is C, All C are D



Conclusion:

Some A are not D ✘

No D is B ✘

No A is C ✓

No A is D ✓

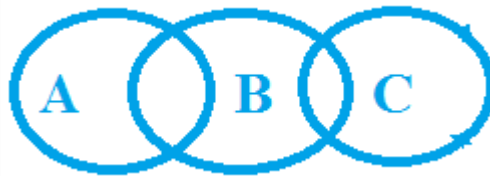
No D is A ✘

Possibility



Example 1

Statement Some A are B, Some B are C



Conclusion

- | | |
|--|---|
| a) Some A are B | ✓ |
| b) Some B are A | ✓ |
| c) Some A are not C | ✗ |
| d) Some A are B is being a possibility | ✗ |
| e) Some B are A is a possibility | ✗ |
| f) Some A are not C is a possibility | ✓ |

Explanation (Simple case A,B & C) :

Let A, B & C are three person. A & B know each other. B & C know each other But B knows both.Now, Will A talk about C? Answer is 'Not!,Neither Positive Nor Negative' because he doesn't know him.So conclusion C is False.

Possibility Case (Conclusion : D,E & F) :

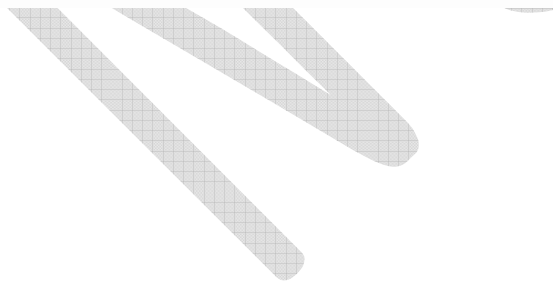
Now Let's take a look at conclusion E.Now Suppose there is raining outside your home and someone comes to you and say there is a possibility to rain today.What would you say to him,'Mad!'"The Same scenario is here By looking at diagram it clearly says that Some B are A then how could say it is 'possible' which is actually there.Hence Possibility makes it wrong or false the conclusion.So Conclusion E is wrong.

Now talk about conclusion F which says Some A are not c which we don't know but it says to let it is a 'possibility' so anything could be possible which doesn't make our statement wrong or contradict with statement.If we make it like this below:



We talk here about possibility which could be anything which especially not contradict with our statement. So F which was False in Simple Case but When we talk about the possibility is becoming true.

Let's take another example for this. Now Let There is a cloudy sky outside your home. Someone comes to you and say, " There is a possibility that there might be rain today", Now you have no idea whether it rain today or not. So you might be saying , " Bro! It is possible". Now here you cannot talk about negative because in Syllogism Negative Answer will never be there.





In a statement word like these called possibilities

- Can be
- Possible
- May be / might be
- Chances
- Occurs
- is being a possibility
- is a possible

In a statement word like these called sureties

- Can Never be
- Can