



# Standard Statements/Conclusions

Universal Statements



▶ All A are B

▶ Some A are B

▶ No A are B

▶ Some A are not B

Particular statements

Statements

12 or more

Conclusions

Venn diagrams.

# Important Points

✓ 3 cases

- ▶ Conclusion → All cases
- ▶ Probable Conclusion → At least one case



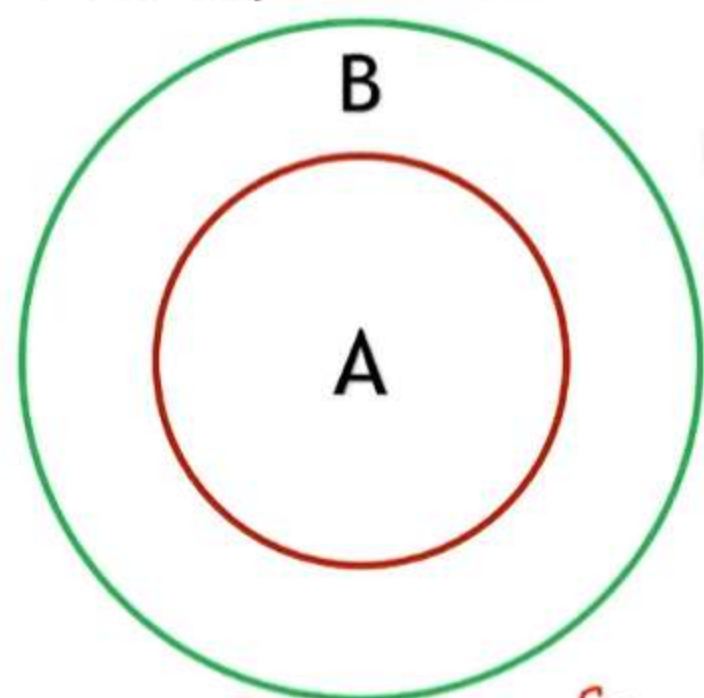
# 1. All A are B

Venn diagrams.

Concl

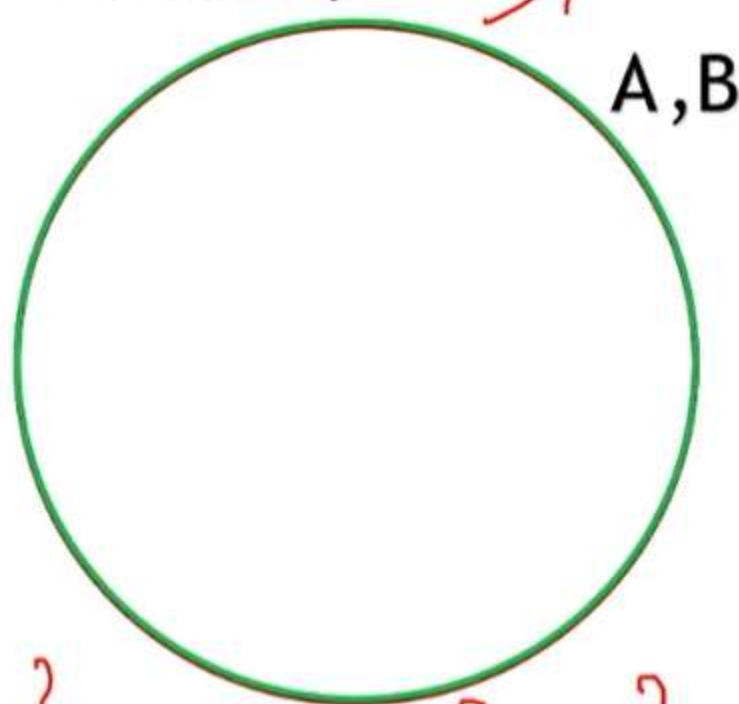


✓ Primary 1. case.



$$\rightarrow A = \{1, 2, 3\} \quad B = \{1, 2, 3, 4, 5\}$$

Secondary 2. case  $\Rightarrow$  All B are A



$$A = \{1, 2, 3\} \quad B = \{1, 2, 3\}$$

Definite Conclusion:

$\Rightarrow$  Some B are A.

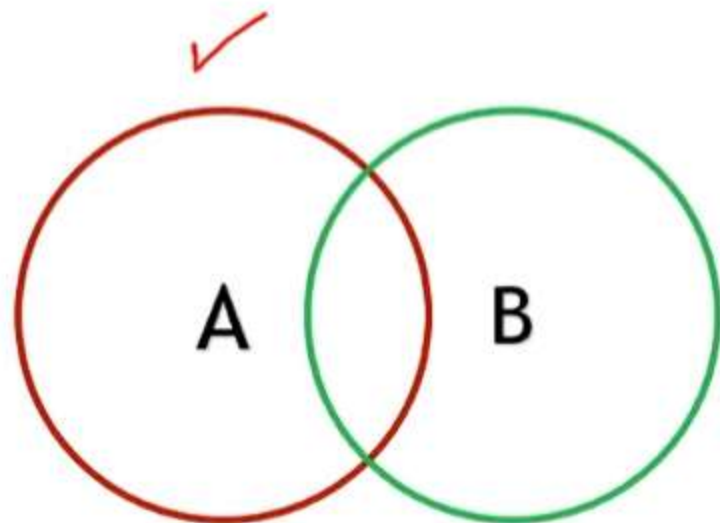
Possible Conclusion:

At least one case. All B are A.

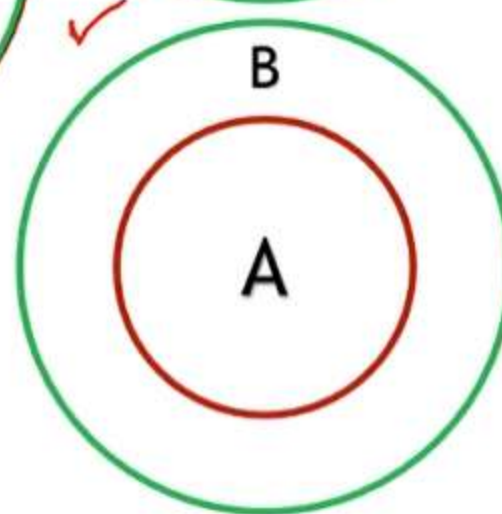
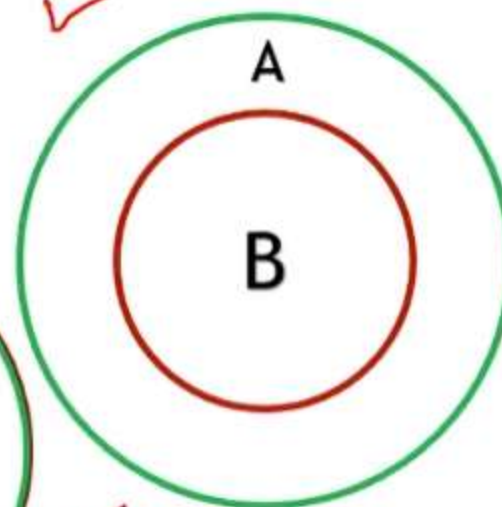
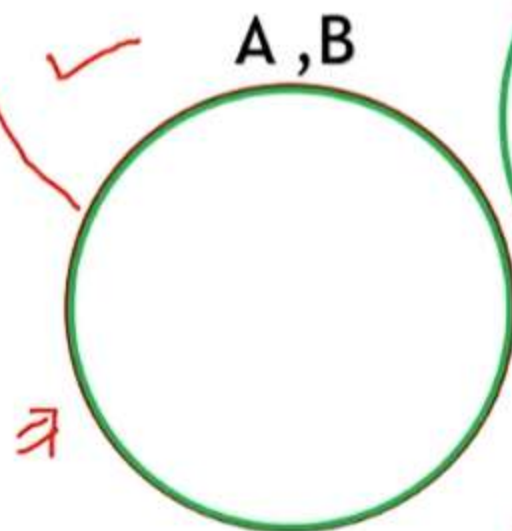


# Some A are B

Primary



$\text{All A are B} \Rightarrow \text{True}$   
 $\{ \text{Some A are B is also true.} \}$   
 $\text{All B are A}$   
 $\text{Some B are A}$   
 Secondary



Definite Conclusion:

✓ Some B are A.

Possible Conclusion:

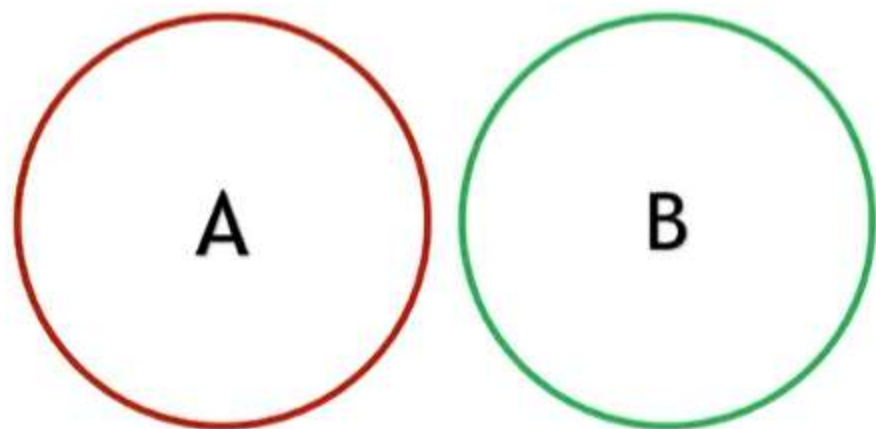
All A are B.

All B are A.



No A are B  $\Rightarrow$  All A are B is true  
 $\Rightarrow$  Some A are B is true

Primary



No B are  
 Some B are



true.

True

Definite Conclusion:

$\Rightarrow$  No B are A.

Possible Conclusion:

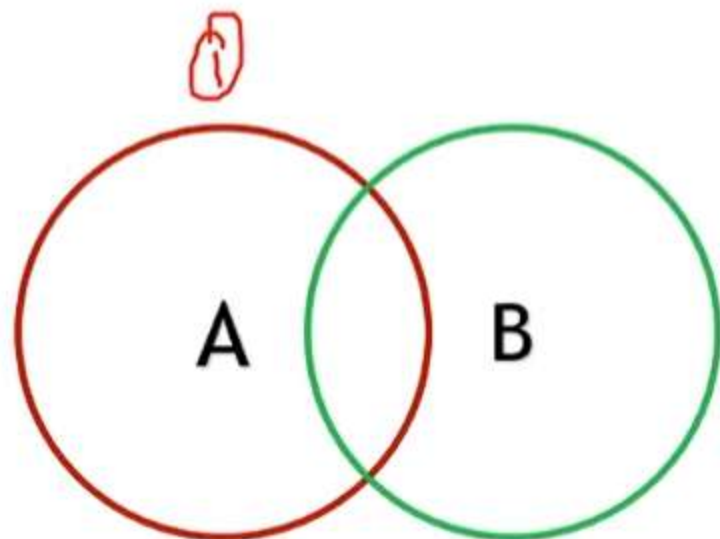
✓ Some B are not A.

Subset Some A are not B. ✓

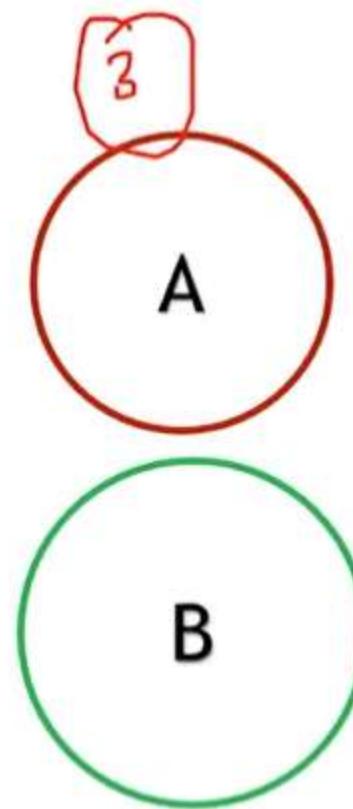
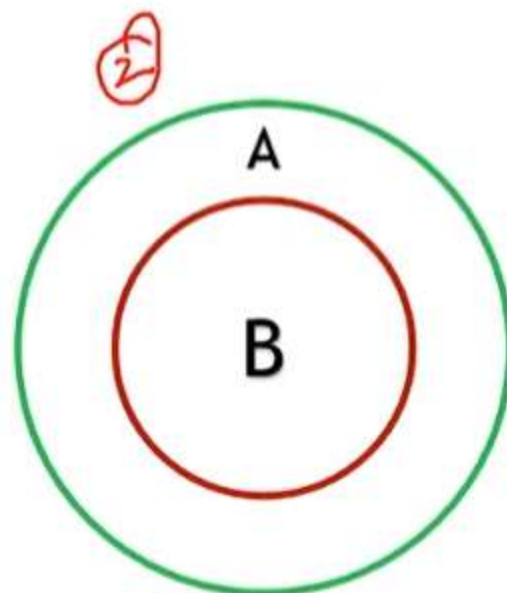


## Some A are not B

Primary



Secondary



**Definite Conclusion:**

-

**Possible Conclusion:**

- ③ Some B are not A.
- ① Some A are B.
- ① Some B are A.
- ② All B are A.
- ③ No A are B.
- ③ No B are A.



# Counter-statements



Statements	Counter-statements
▶ All A are B	▶ Some B are A
▶ Some A are B	▶ Some B are A
▶ No A are B	▶ No B are A

## Statements:

Some stools are chairs.

Some tables are chairs.

## Conclusions:

I. Some stools are tables.

II. No stools are tables.

- A. Only Conclusion I is true.
- B. Only Conclusion II is true.
- C. Both Conclusions I and II are true.
- D. Either Conclusion I or Conclusion II is true.



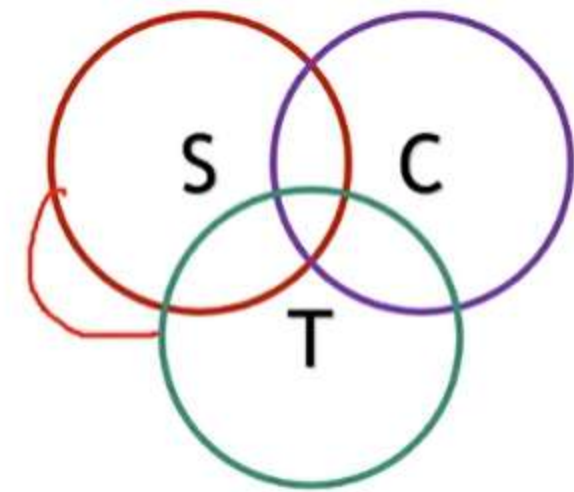
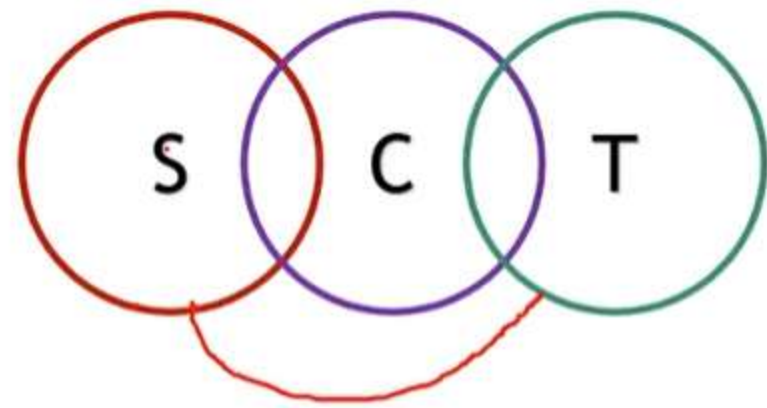




✓ i. Some stools are tables.

Either or Case

~~ii. No stools are tables.~~



I is true or II is true.  
Option D

**Statements:**

Some stools are chairs.  
Some tables are chairs.

## Statements:

All elephants are innocent animals.

No innocent animals eat pineapple.

## Conclusions:

I. Some innocent animals eat pineapple.

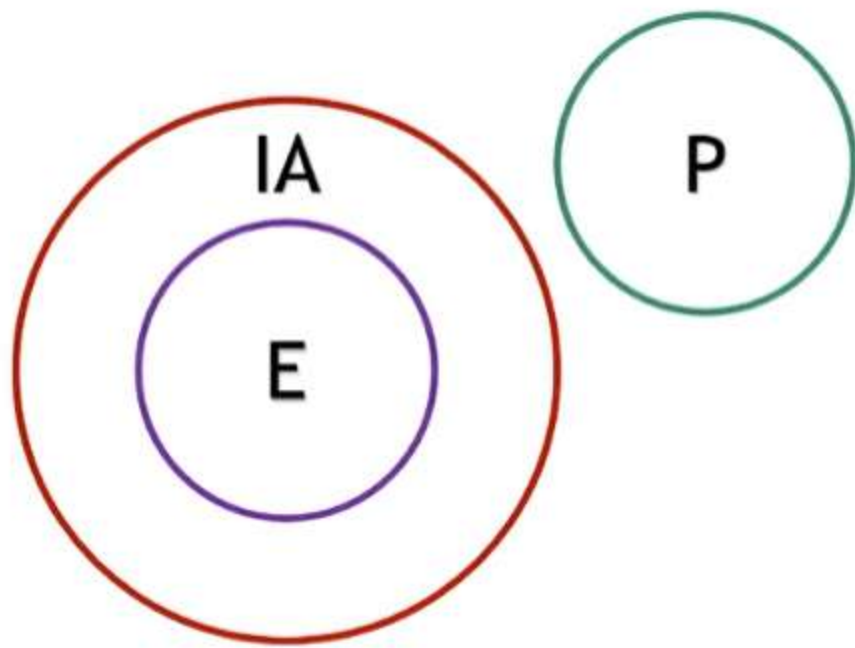
II. Some elephants eat pineapple.

- A. Only Conclusion I is true.
- B. Only Conclusion II is true.
- C. Both Conclusions I and II are true.
- D. Neither Conclusion I nor Conclusion II is true.



# Solution

- I. Some innocent animals eat pineapple.
- II. Some elephants eat pineapple.



Option D

## Statements:

All elephants are innocent animals.

No innocent animals eat pineapple.



**Statements:**

Some Sheep are Goats.

All Goats are Snails.

Some Snails are Yaks.

**Conclusions:**

I. Some Yaks are Goats.

II. Some Snails are Goats.

III. Some Snails are Sheep.

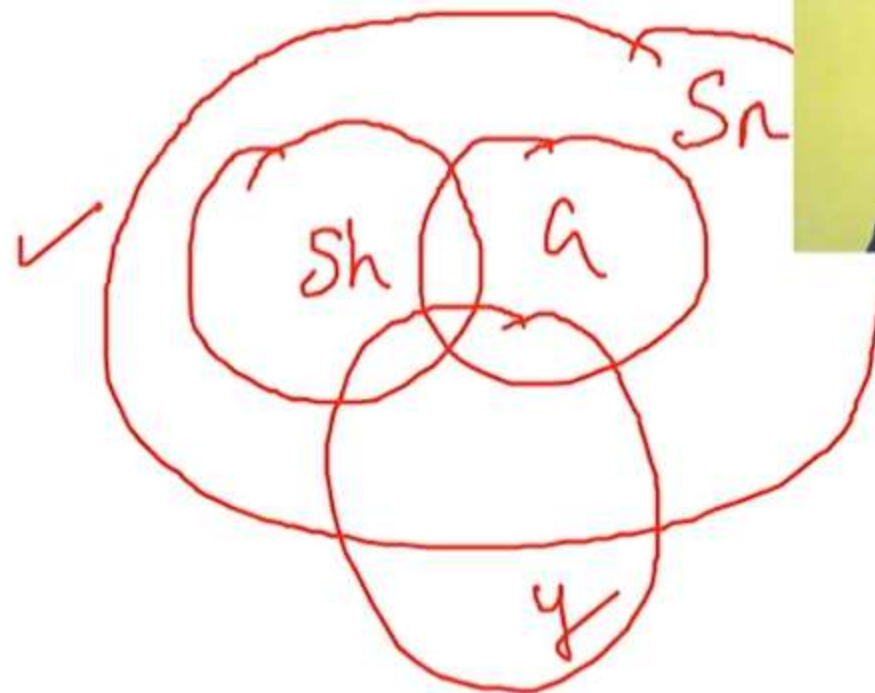
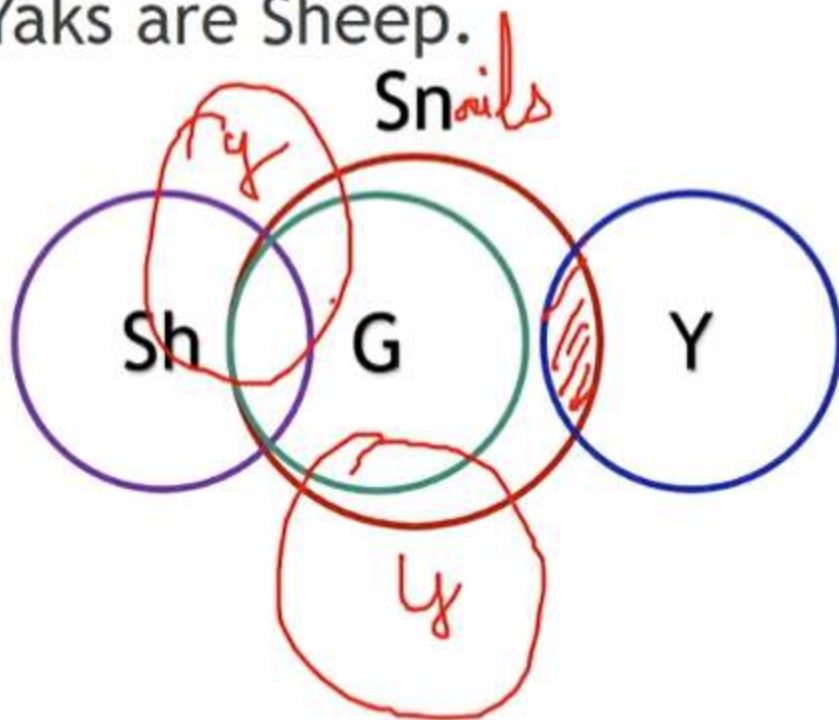
IV. Some Yaks are Sheep.

- A. All follow
- B. Only II and III follow
- C. Only III follows
- D. Only IV follows



# Solution

- I. Some Yaks are Goats.
- II. Some Snails are Goats.
- III. Some Snails are Sheep.
- IV. Some Yaks are Sheep.



## Statements:

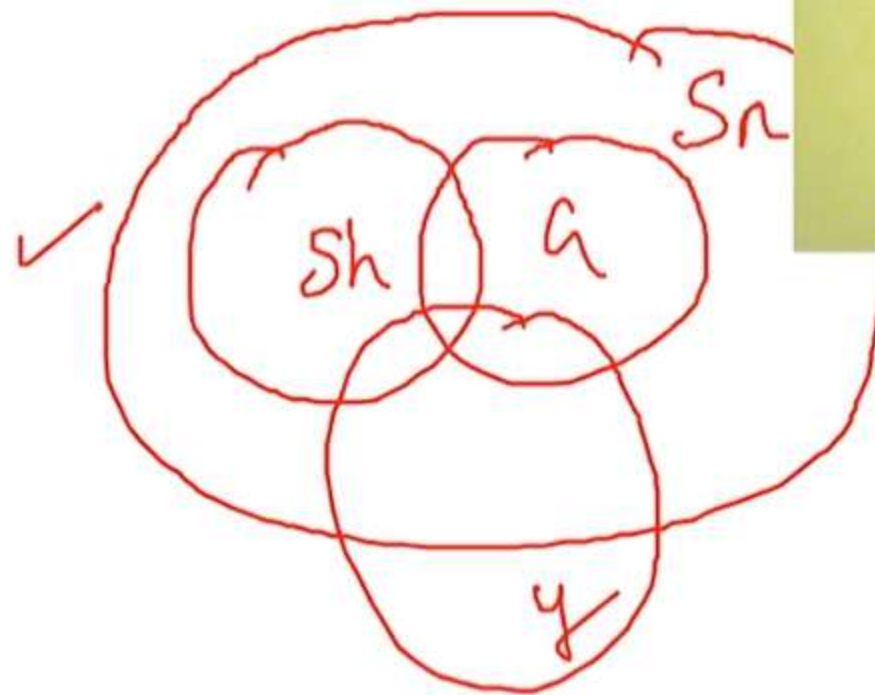
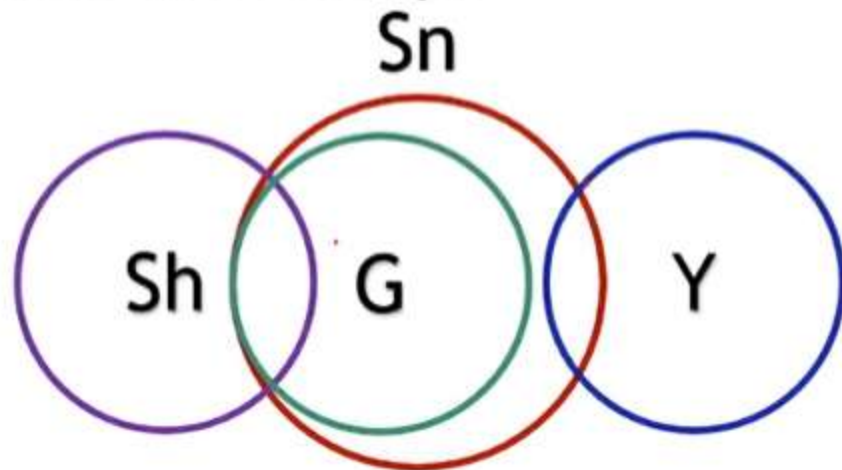
Some Sheep are Goats.

All Goats are Snails.

Some Snails are Yaks.

# Solution

- I. Some Yaks are Goats. ✗
- II. Some Snails are Goats.
- III. Some Snails are Sheep.
- IV. Some Yaks are Sheep.



## Statements:

Some Sheep are Goats.

All Goats are Snails.

Some Snails are Yaks.



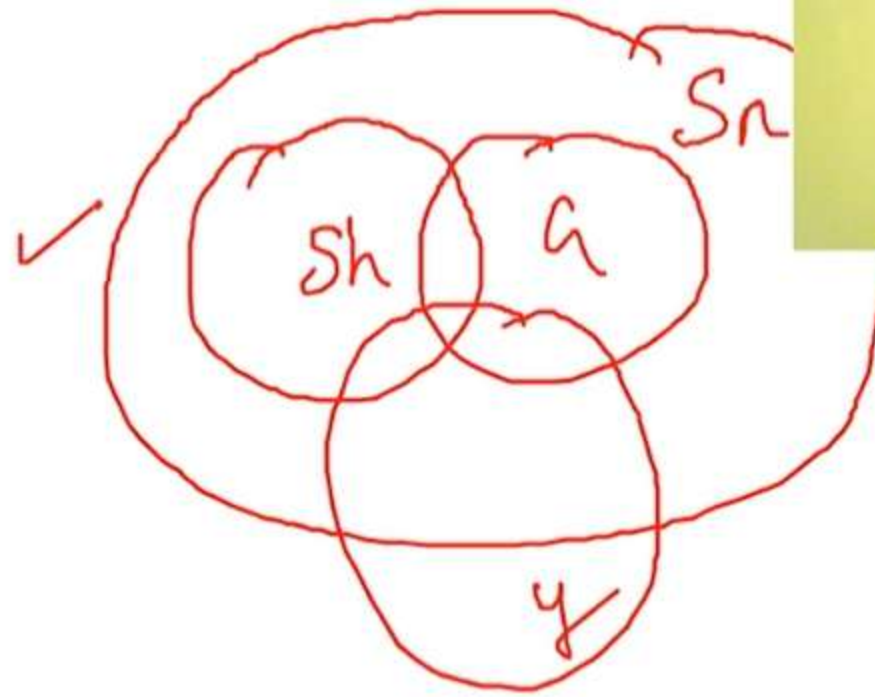
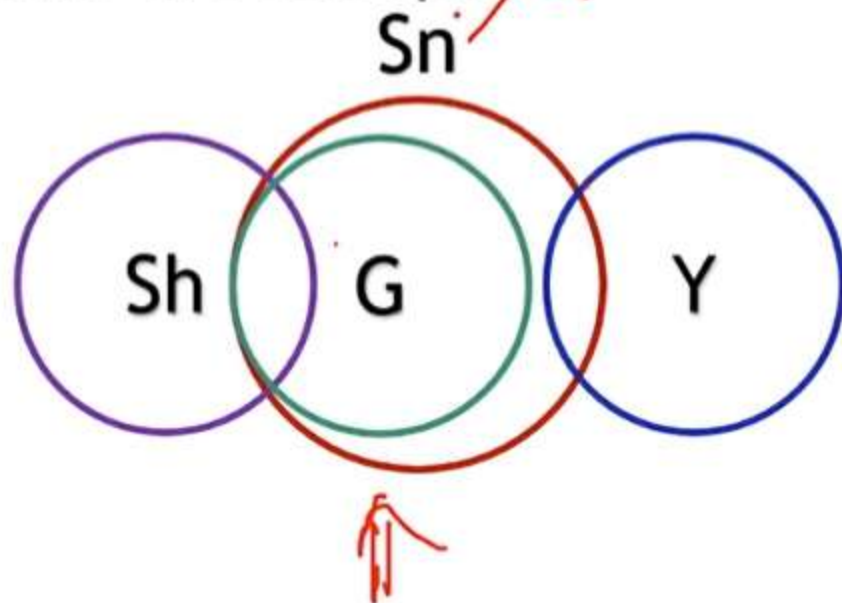
# Solution

I. Some Yaks are Goats. ✗

II. Some Snails are Goats. ✓

III. Some Snails are Sheep. ✓

IV. Some Yaks are Sheep. ✗



## Statements:

Some Sheep are Goats.

All Goats are Snails.

Some Snails are Yaks.

## Statements:

Some Winners are Quitters.

All Quitters are Losers.

## Conclusions:

I. All Winners could be Losers.

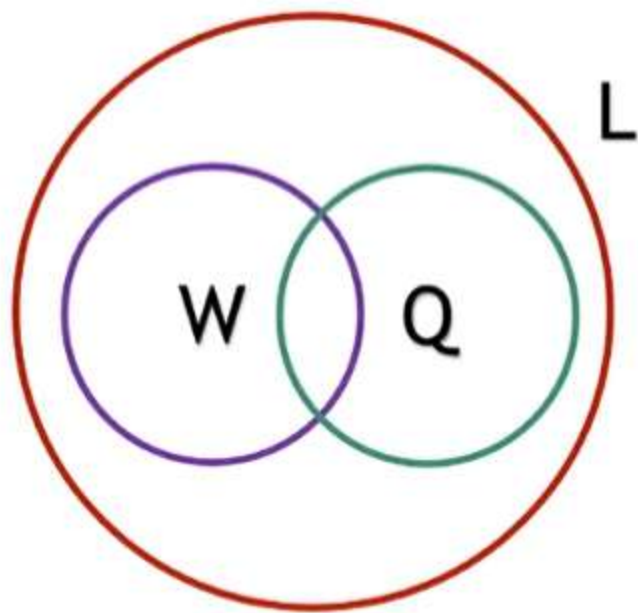
II. A Quitter cannot be a Loser.

- A. Only Conclusion I is true.
- B. Only Conclusion II is true.
- C. Both Conclusions I and II are true.
- D. Neither Conclusion I nor Conclusion II is true.



- ✓ I. All Winners could be Losers. *Possible*  
✗ II. A Quitter cannot be a Loser. *Definite*

A. Only Conclusion I is



### Statements:

Some Winners are Quitters.  
All Quitters are Losers.

