

Logical Reasoning.

② Syllogism
Truth

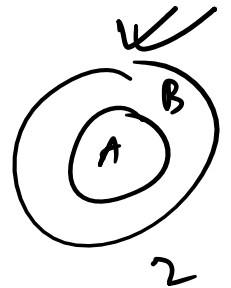
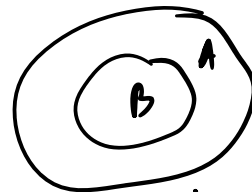
All Boys are Good
 Some Girls are Bad
 Some Men are Good

~~All~~ All A are B
 All B are C
 Some C are A

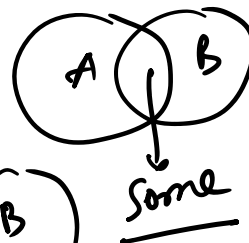
① NO Relation to Real life ..

ACB

All A are B
Small Bigger

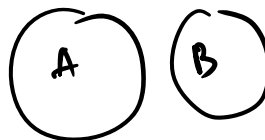


Some A are B



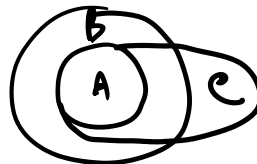
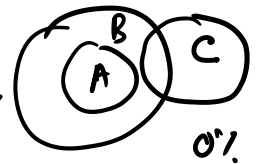
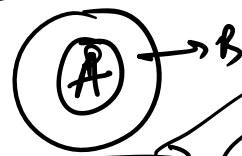
②

NO A are B



3rd family ..

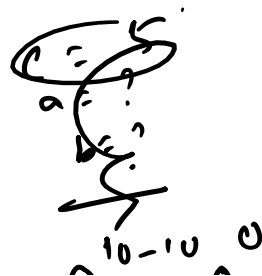
All A are B
 Some B are C



- A None of the above
- B Data insufficient
- C Can't be determined

$$\begin{array}{r} 5+6 \\ 0 \\ \hline 5^0 = 1 \quad 0^0 = X \end{array}$$

$$\begin{array}{l} a+b = 15 \\ 0+b+c = 20 \\ \hline \text{NO} \end{array}$$



() -

$$\begin{aligned}
 & 5^0 = 1 \quad 0 = x \quad / 0 \dots \\
 & \log(-5) \times \frac{5^5}{5^5} = 5^{5-5} = 5^0 \\
 & \log(0) \times
 \end{aligned}$$

$$\frac{0}{0} = 0^{10-10} = 0^0 = 0$$

Father's son = 62
 wife's Balm = 100
~~40222~~
 50712 (38)

Spurred 7 rule

$$2.5 \times a \approx 70$$

a + b + c = 20

~~a + b + c =~~

a + b + c = 3 → RHS

- 1, 1, 1
- 0, 1, 2
- 0, 2, 1
- 1, 0, 2
- 2, 0, 1
- 1, 2, 0
- 2, 1, 0
- 0, 0, 3
- 0, 3, 0
- 3, 0, 0

$$2 + 4 + 2 + 1 + 1 = 92$$

$$92 + 5 \times 5 = 117$$

$$0 + b = 2$$

- 4, 1
- 2, 0
- 0, 2

$$\begin{array}{r}
 1 \\
 2 \\
 4 \\
 \hline
 1 \\
 2 \\
 4
 \end{array}$$

3! ⇒ 3 × 2 × 1

$$\begin{aligned}
 & 3 + 3 - 1 = 3 - 1 \\
 & \Rightarrow 2
 \end{aligned}$$

$$a + b + c + d = 10$$

$$\Rightarrow \frac{5!}{2!3!} = 10$$

$$10 + 4 - 1 = 13$$

$$\Rightarrow \frac{12}{2+8} = 1.5$$

$$5! \Rightarrow 5 \times 4 \times 3 \times 2 \times 1$$

$$8C_1 \Rightarrow \frac{8!}{1!7!}$$

$$a+b+c+d = 12$$

$$12+4-1 \ C \ 4-1$$

$$\Rightarrow \binom{15}{3} \Rightarrow \frac{15!}{3!12!}$$

$$12C_2 \Rightarrow \frac{12!}{2!10!}$$

$$\frac{6 \times 10!}{2 \times 10!} \Rightarrow \binom{6}{2}$$

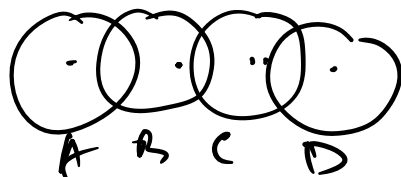
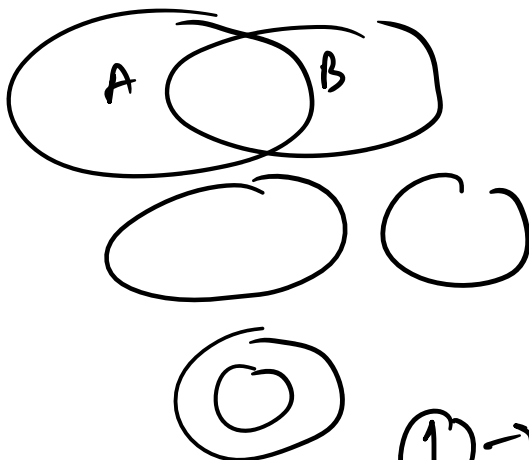
⑧

$$a+b+c = 5$$

$$5+3-1 \ C \ 3-1$$

$$\Rightarrow 7C_2 \Rightarrow \frac{7!}{2!5!}$$

$$\Rightarrow \frac{7 \times 6 \times 5!}{2 \times 5!} \Rightarrow \binom{7}{2} = 21$$



$$\binom{1}{1} \rightarrow 9$$

$$10 \rightarrow 9 \times 10 \Rightarrow \frac{90}{2} = 45$$

World cup $\rightarrow \binom{10}{2}$

- Ans
- 1 $\rightarrow \binom{9}{1} \checkmark$
 - 2 $\rightarrow \binom{8}{1} \checkmark$
 - 3 $\rightarrow \binom{7}{1} \checkmark$

2 Semifinal

- $\binom{1}{1}$ vs 2
- $\binom{1}{1}$ vs 4
- 1 final
- $\binom{1}{1}$ vs 3

48 ✓

HW)

3	→	7	✓
4	→	6	✓
5	→	5	✓
6	→	4	✓
7	→	3	✓
8	→	2	✓
9	→	1	✓
10	→	0	

45

12			
13	✓		
14	✓		
15	✓		
16			
17			
18			
19			
10			

1	2	3	4
1	2		
1	3		
1	4		
2	3		
2	4		
3	4		

Gufoom

1 2	2 1	3 1
2 1	2 1	3 2
1 3	2 3	3 4
1 4	2 4	

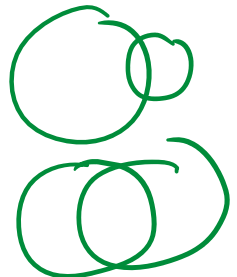
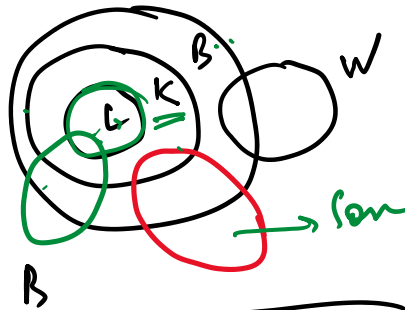
Statements: All the locks are keys. All the keys are bats. Some watches are bats.

Conclusions:

entire

$K > L$

$A > B > C$
 $A > C$



- 1 Some bats are locks. ✓
- 2 Some watches are keys. ✓
- All the keys are locks. X $K < L$
- Only (1) and (2) ✓
- Only (1) ✓
- Only (2) ✓
- Only (1) and (3) ✓

$A > B > C > D$
 $B > X$

$0 < X < 29$

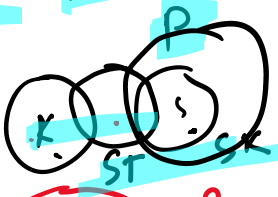
50
40 (B)
30
10

$A > B > X > C > D$
 $A > B > X > C > D$

Statements: Some keys are staplers. Some staplers are stickers. All the stickers are pens.

Conclusions:

Some pens are staplers. ✓



Conclusions:

Some pens are staplers.

Some stickers are keys.

No sticker is key.

Some staplers are keys.

Only (1) and (2)

Only (2) and (4)

Only (2) and (3)

Only (1) and (4) and either (2) or (3)

3.

Statements: Some questions are answers. Some answers are writers. All the writers are poets.

Conclusions:

Some writers are answers.

Some poets are questions.

All the questions are poets.

Some poets are answers.

Only (1) and (2)

Only (1) and (4)

Only (1) and (3)

Only (2) and (4)

4.

Statements: Some envelopes are gums. Some gums are seals. Some seals are adhesives.

Conclusions:

Some envelopes are seals.

Some gums are adhesives.

Some adhesives are seals.

Some adhesives are gums.

Only (3)

Only (1)

Only (2)

Only (4)

5.

Statements: All the papers are books. All the bags are books. Some purses are bags.

Conclusions:

Some papers are bags.

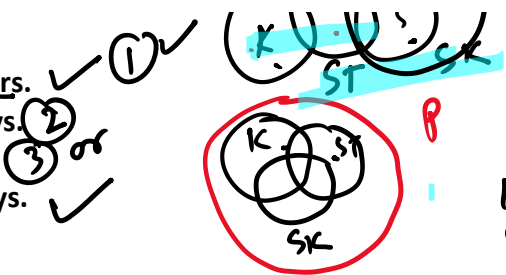
Some books are papers.

Some books are purses.

Only (1)

Only (2) and (3)

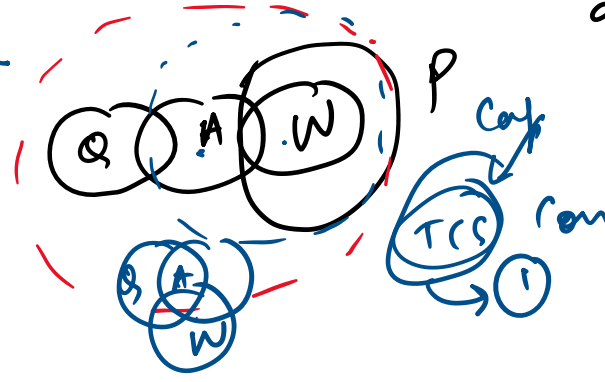
Only (1) and (2)



A → B → C → D → X
 A → B → C → D → X
 A → B → C → D → X

- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓

90623
95123



✓ 100%
 ~~~~~  
 ✓ 100%

✓

**Only (1) and (3)**