



DILR MasterClass

Test & Strategy





Calculations
based

Logic
based

Supermen



Name	Attempts	Correct	NETT



1. The two teams that defeated the leader of Stage-I are:

(1) F & D (2) E & F (3) B & D (4) E & D (5) F & D

2. The only team(s) that Win both matches in Stage-II is (are)

(1) B (2) E & F (3) A, E & F (4) B, E & F (5) B & F

3. The teams that Win exactly two matches in the event are

(1) A, D & F (2) D & E (3) E & F (4) D, E & F (5) D & F

4. The team(s) with the most wins in the event is (are)

(1) A (2) A & C (3) F (4) E (5) B & E



1. On a day of fluctuating market prices, the share price of XYZ Ltd. ends with a gain, i.e, it is higher at the close of the day compared to the opening value. Which trader got the maximum return on that day? (1) Bikram (2) Chetan (3) Abdul (4) Bikram or Chetan (5) **cannot be determined**

2. Which one of the following statements is always true?

- (1) Abdul will not be one with the minimum return
- (2) Return for Chetan will be higher than that of Bikram
- (3) Return for Bikram will be higher than that of Chetan
- (4) Return for Chetan cannot be higher than that of Abdul
- (5) **none of the above**

3. On a “boom” day the share price of XYZ Ltd. keeps rising throughout the day and peaks at the close of the day. Which trader got the minimum return on that day?

- (1) Bikram (2) Chetan (3) **Abdul** (4) Abdul or Chetan (5) cannot be determined

4. On a “bear” day the share price of XYZ Ltd. keeps falling throughout the day and is lowest at the close of the day. Which trader got the maximum return on that day?

- (1) Bikram (2) **Chetan** (3) Abdul (4) Abdul or Chetan (5) cannot be determined



1. Which of the following cannot be true?

(1) At least two horses finished before Spotted

(3) There were three horses between Black and Spotted

(5) Grey came in second

(2) Red finished last

(4) There were three horses between White and Red

2. Suppose, in addition, it is known that Grey came in fourth. Then which of the following cannot be true?

(1) Spotted came in first

(3) White came in second

(5) There was one horse between Black and White

(2) Red finished last

(4) Black came in second

3. Suppose, in addition, it is known that White came in Second. Then which of the following must be true?

(1) Spotted came in first

(3) Grey came in last

(5) Black or Red came in last

(2) Red finished last

(4) Grey came in first

4. Suppose, in addition, it is known that Red came in last. Then which of the following must be true?

(1) Spotted came in first or Second

(3) Grey came in last or 4th

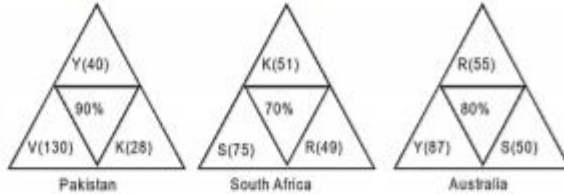
(5) White finished 3rd or 2th

(2) White finished 3rd or 4th.

(4) Grey came in first or second

Answer the questions on the basis of the information given below. Coach John sat with the score cards of Indian players from the 3 games in a one-day cricket tournament where the same set of players played for India and all the major batsmen got out.

John summarized the batting performance through three diagrams, one for each game. In each diagram, the three outer triangles communicate the number of runs scored by the three top scorers from India, where K, R, S, V, and Y represent



The middle triangle in each diagram denotes the percentage of the total score that was scored by the top three Indian scorers in that game. No two players score the same number of runs in the same game. John also calculated two batting indices for each player based on his scores in the tournaments; the R-index of a batsman is the difference between his highest and lowest scores in the 3 games while the M-index is the middle number, if his scores are arranged in non-increasing order.

- For how many Indian players is it possible to calculate the exact M-index? (1) 1 (2) 2 (3) 3 (4) more than 3
- Among the players mentioned, who can have the lowest R-index from the tournament? (1) Only Kaif, Rahul or Yuvraj (2) Only Kaif or Rahul (3) Only Kaif or Yuvraj (4) Only Kaif
- How many players among those listed definitely scored less than Yuvraj in the tournament? (1) 0 (2) 1 (3) 2 (4) More than 2
- Which of the players had the best M-index from the tournament? (1) Rahul (2) Saurav (3) Virender (4) Yuvraj

Answer the questions on the basis of the information given below. Prof. Singh has been tracking the number of visitors to his homepage. His service provider has provided him with the following data on the country of origin of the visitors and the university they belong to. One University is visited by visitor from particular country only.

COUNTRY	Number of visitors			UNIVERSITY	Number of visitors		
	1	2	3		1	2	3
Canada	2	0	0	University 1	1	0	0
Netherlands	1	1	0	University 2	2	0	0
India	1	2	0	University 3	0	1	0
UK	2	0	2	University 4	0	0	2
USA	1	0	1	University 5	1	0	0
				University 6	1	0	1
				University 7	2	0	0
				University 8	0	2	0

- To which country does University 5 belong? (1) India or Netherlands but not USA (2) India or USA but not Netherlands (3) Netherlands or USA but not India (4) India or USA but not UK
- University 1 can belong to (1) UK (2) Canada (3) Netherlands (4) USA

Answer the following questions based on the information given below:

For admission to various affiliated colleges, a university conducts a written test with four different sections, each with a maximum of 50 marks. The following table gives the aggregate as well as the sectional cut-off marks fixed by six different colleges affiliated to the university. A student will get admission only if he/she gets marks greater than or equal to the cut-off marks in each of the sections and his/her aggregate marks are at least equal to the aggregate cut-off marks as specified by the college.

College	Sectional Cut – off Marks				Aggregate Cut-off Marks
	A. Quant	B. Verbal	C. Logic	D. DI	
College 1	42	42	42		176
College 2		45	45		175
College 3			46		171
College 4	43			45	178
College 5	45		43		180
College 6		41		44	176

- Ramaya got No calls from any colleges. What could be the minimum aggregate marks obtained by her? (a) 180 (b) 181 (c) 171 (d) 170
- Gauri got calls from three colleges. What could be the minimum marks obtained by her in a section? (a) 40 (b) 41 (c) 180 (d) 25
- Minakshi did not get a call from even a single college. What could be the maximum aggregate marks obtained by her? (a) 180 (b) 171 (c) 184 (d) 170
- What is the minimum aggregate required by a Cetking student in Section D so that student clear all colleges cut-off? (a) 180 (b) 181 (c) 200 (d) 170

The Dean's office recently scanned student results into the central computer system. When their character reading software cannot read something, it leaves the space blank. The scanner output reads as follows:

In the grading system, A, B, C, D, and F grades fetch 6, 4, 3, 2, and 0 grade points respectively. The Grade Point Average (GPA) is the arithmetic mean of the grade points obtained in the five subjects. For example Nisha's GPA is $(6 + 2 + 4 + 6 + 0) / 5 = 3.6$. Some additional facts are also known about the students' grades. These are (a) Vipul obtained the same grade in Marketing as Aparna obtained in Finance and Strategy. (b) Fazal obtained the same grade in Strategy as Utkarsh did in Marketing. (c) Tara received the same grade in exactly three courses.

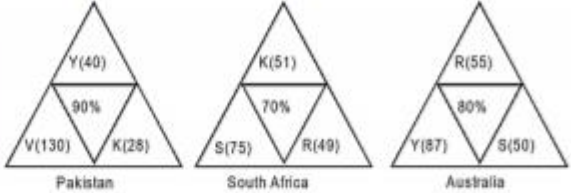
Name	Finance	Marketing	Statistics	Strategy	Operations	GPA
Aparna		B	F			1.4
Bikas	D	D	F	F		
Chandra		D	A	F	F	2.4
Deepak	A	B		D	D	3.2
Fazal	D	F	B		D	2.4
Gowri	C	C	A		B	3.8
Hari		B	A		D	2.8
Ismet			B		A	
Jagdeep	A	A	B		C	3.8
Kunal	F		A	F	F	1.8
Leena	B	A		B	F	3.2
Manab			A	B	B	
Nisha	A	D	B	A	F	3.6
Osman	C		B	B	A	4.6
Preeti	F	D		D		3.2
Rahul	A	C	A		F	4.2
Sameer		C	F	B		
Tara	B					2.4
Utkarsh			F	C	A	3
Vipul	A		C	C	F	2.4

- What grade did Preeti obtain in Statistics? (1) A (2) B (3) C (4) D
- In operations, Tara could have received the same grade as (1) Ismet (2) Hari (3) Jagdeep (4) Manab

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where K, R, S, V, and Y represent Kaif, Rahul, Saurav, Virender, and Yuvraj respectively. In each diagram, the three outer triangles communicate the number of runs scored by the three top scores from India, where K, R, S, V, and Y represent Kaif, Rahul, Saurav, Virender, and Yuvraj respectively. The percentage in the center of each triangle denotes the percentage of the total score that was scored by the top three Indian scorers in that game. The M-index of a batsman is the difference between his best and lowest scores in the same number of runs in the same game. John also calculated the M-index for each player based on his scores in the tournaments; the R-index of a batsman is the difference between his best and lowest scores in the 3 games while the M-index is the middle number, if there are a minimum of 3 test scores.

- For how many Indian players is it possible to calculate the exact M-index? (1) 0 (2) 1 (3) 2 (4) More than 2
- Among the players mentioned, who can have the lowest R-index from the tournament? (1) Only Kaif, Rahul or Yuvraj (2) Only Kaif or Rahul (3) Only Kaif or Yuvraj (4) Only Kaif
- How many players among those listed definitely scored less than Yuvraj in the tournament? (1) 0 (2) 1 (3) 2 (4) More than 2
- Which of the players had the best M-index from the tournament? (1) Rahul (2) Saurav (3) Virender (4) Yuvraj

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- To which country does University 5 belong? (1) India or Netherlands but not USA (2) India or USA but not Netherlands (3) Netherlands or USA but not India (4) India or USA but not UK
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Answer the following questions based on the information given below: For admission to various affiliated colleges, a university conducts a written test with four different sections, each with a maximum of 50 marks. The following table gives the aggregate as well as the sectional cut-off marks fixed by six different colleges affiliated to the university. A student will get admission only if he/she gets marks greater than or equal to the cut-off marks in each of the sections and his/her aggregate marks are at least equal to the aggregate cut-off marks as specified by the college.

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College 4	43			45	178
College 5	45		43		180
College 6		44		44	176

- Ram did not appear in any colleges. What could be the minimum aggregate marks obtained by her? (a) 180 (b) 171 (c) 170 (d) 185
- Ganesh got marks from three colleges. What could be the minimum marks obtained by her in a section? (a) 40 (b) 45 (c) 180 (d) 5
- Minakshi did not get a call from even a single college. What could be the maximum aggregate marks obtained by him? (a) 180 (b) 171 (c) 184 (d) 170
- What is the maximum score required by a Cetking student in Section D so that student clear all colleges cut-off? (a) 180 (b) 181 (c) 200 (d) 170

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Name	Finance	Marketing	Statistics	Strategy	Operations	GPA
Aparna		B	F			1.4
Bikas	D	D	F	F		
Chandra		D	A	F	F	2.4
Deepak	A	B		D	D	3.2
Fazal	D	F	B		D	2.4
Gowri	C	C	A		B	3.8
Hari		B	A		D	2.8
Ismet			B		A	
Jagdeep	A	A	B		C	3.8
Kunal	F		A	F	F	1.8
Leena	B	A		B	F	3.2
Manab			A	B	B	
Nisha	A	D	B	A	F	3.6
Osman	C		B	B	A	4.6
Preeti	F	D		D		3.2
Rahul	A	C	A		F	4.2
Sameer		C	F	B		
Tara	B					2.4
Utkarsh			F	C	A	3
Vipul	A		C	C	F	2.4

- What grade did Preeti obtain in Statistics? (1) A (2) B (3) C (4) D
- In operations, Tara could have received the same grade as (1) Ismet (2) Hari (3) Jagdeep (4) Manab



Answer the following questions based on the information given below: In a sports event, six teams (A, B, C, D, E and F) are competing against each other. Matches are scheduled in two stages. Each team plays three matches in Stage – I and two matches in Stage – II. No team plays against the same team more than once in the event. No ties are permitted in any of the matches. The observations after the completion of Stage – I and Stage – II are as given below.

Stage-I:

- One team Win all the three matches.
- D lost to A but Win against C and F.
- B lost at least one match.
- Two teams lost all the matches.
- E lost to B but Win against C and F.
- F did not play against the top team of Stage-I.

Stage-II:

- Of the two teams at the bottom after Stage-I, one team Win both matches, while the other lost both matches.
- The leader of Stage-I lost the next two matches
- Once more team lost both matches in Stage-II.



1. The two teams that defeated the leader of Stage-I are:
(1) F & D (2) E & F (3) B & D (4) E & D (5) F & D

2. The only team(s) that Win both matches in Stage-II is (are)
(1) B (2) E & F (3) A, E & F (4) B, E & F (5) B & F

3. The teams that Win exactly two matches in the event are
(1) A, D & F (2) D & E (3) E & F (4) D, E & F (5) D & F

4. The team(s) with the most wins in the event is (are)
(1) A (2) A & C (3) F (4) E (5) B & E

	A	B	C	D	E	F
A	X	Win	Win	Win	Lost	Lost
B	Lost	X	Win	Win	Win	Win
C	Lost	Lost	X	Lost	Lost	Lost
D	Lost	Lost	Win	X	Lost	Win
E	Win	Lost	Win	Win	X	Win
F	Win	Lost	Win	Lost	Lost	X



Stage-I: 3 matches

- One team Win all the three matches.
- Two teams lost all the matches.
- D lost to A but Win against C and F.
- E lost to B but Win against C and F.
- B lost at least one match.
- F did not play against the top team of Stage-I.

	A	B	C	D	E	F
A	X					
B		X				
C			X			
D				X		
E					X	
F						X



Stage-I: 3 matches

- One team Win all the three matches.
- Two teams lost all the matches.
- D lost to A but Win against C and F.
- E lost to B but Win against C and F.
- B lost at least one match.
- F did not play against the top team of Stage-I.

	A	B	C	D	E	F
A	X			Win		
B		X			Win	
C			X	Lost	Lost	
D	Lost		Win	X		Win
E		Lost	Win		X	Win
F				Lost	Lost	X



Stage-I: 3 matches

- One team Win all the three matches.
- D lost to A but Win against C and F.
- B lost at least one match.
- Two teams lost all the matches.
- E lost to B but Win against C and F.
- F did not play against the top team of Stage-I.

	A	B	C	D	E	F	
A	X	Win	Win	Win			Win all
B	Lost	X			Win	Win	Lost one
C	Lost		X	Lost	Lost		Lost all
D	Lost		Win	X		Win	
E		Lost	Win		X	Win	
F		Lost		Lost	Lost	X	Lost all, xA



Stage-II:

- Of the two teams at the bottom after Stage-I, one team Win both matches, while the other lost both matches.
- The leader of Stage-I lost the next two matches
- Once more team lost both matches in Stage-II.

	A	B	C	D	E	F
A	X	Win	Win	Win		
B	Lost	X			Win	Win
C	Lost		X	Lost	Lost	
D	Lost		Win	X		Win
E		Lost	Win		X	Win
F		Lost		Lost	Lost	X



Stage-II:

- Of the two teams at the bottom after Stage-I, one team Win both matches, while the other lost both matches.
- The leader of Stage-I lost the next two matches
- Once more team lost both matches in Stage-II.

	A	B	C	D	E	F
A	X	Win	Win	Win	Lost	Lost
B	Lost	X	Win	Win	Win	Win
C	Lost	Lost	X	Lost	Lost	Lost
D	Lost	Lost	Win	X	Lost	Win
E	Win	Lost	Win	Win	X	Win
F	Win	Lost	Win	Lost	Lost	X



1. The two teams that defeated the leader of Stage-I are:

(1) F & D (2) E & F (3) B & D (4) E & D (5) F & D

2. The only team(s) that Win both matches in Stage-II is (are)

(1) B (2) E & F (3) A, E & F (4) B, E & F (5) B & F

3. The teams that Win exactly two matches in the event are

(1) A, D & F (2) D & E (3) E & F (4) D, E & F (5) D & F

4. The team(s) with the most wins in the event is (are)

(1) A (2) A & C (3) F (4) E (5) B & E



Answer the following questions based on the information given below:

Abdul, Bikram and Chetan are three professional traders who trade in shares of a company XYZ Ltd. Abdul follows the strategy of buying at the opening of the day at 10 am and selling the whole lot at the close of the day at 3 pm. Bikram follows the strategy of buying at hourly intervals: 10 am, 11am, 12 noon, 1 pm. And 2 pm, and selling the whole lot at the close of the day, Further, he buys an equal number of shares in each purchase. Chetan follows a similar pattern as Bikram but his strategy is somewhat different. Chetan's total investment amount is divided equally among his purchases. The profit or loss made by each investor is the difference between the sale value at the close of the day less the investment in purchase. The "return" for each investor is defined as the ratio of the profit or loss to the investment amount expressed as a percentage.

1. On a day of fluctuating market prices, the share price of XYZ Ltd. ends with a gain, i.e, it is higher at the close of the day compared to the opening value. Which trader got the maximum return on that day?

(1) Bikram (2) Chetan (3) Abdul (4) Bikram or Chetan (5) cannot be determined



Answer the following questions based on the information given below:

Abdul follows buying at the opening of the day at 10 am and selling the whole lot at the close of the day at 3 pm.

Bikram buying at hourly intervals: 10 am, 11am, 12 noon, 1 pm. And 2 pm, and selling the whole lot at the close of the day, Further, he buys an equal number of shares in each purchase.

Chetan follows a similar pattern as Bikram but his strategy is somewhat different. Chetan's total investment amount is divided equally among his purchases.

On a day of fluctuating market prices, the share price of XYZ Ltd. ends with a gain, i.e, it is higher at the close of the day compared to the opening value. Which trader got the maximum return on that day?

(1) Bikram (2) Chetan (3) Abdul (4) Bikram or Chetan (5) cannot be determined



On a “boom” day the share price of XYZ Ltd. keeps rising throughout the day and peaks at the close of the day. Which trader got the minimum return on that day?

(1) Bikram (2) Chetan (3) Abdul (4) Abdul or Chetan (5) cannot be determined

Boom		Morning	Mid	Evening	Investing	Selling	Gain	%gain
	Shares	100	500	1000		1000		
Abdul	30	3000	15000	30000	3000	30000	27000	900%
Bikram	10	1000	5000	10000	16000	30000	14000	88%
Chetan	10 10 10	5000	5000	5000	15000	65000	50000	333%
		50	10	5				

A > C > B



On a “bear” day the share price of XYZ Ltd. keeps falling throughout the day and is lowest at the close of the day. Which trader got the maximum return on that day?

(1) Bikram (2) Chetan (3) Abdul (4) Abdul or Chetan (5) cannot be determined

Bear		Morning	Mid	Evening	Investing	Selling	Gain	%gain
	Shares	100	50	10		10		
Abdul	30	3000	1500	300	3000	300	-2700	-90%
Bikram	10	1000	500	100	1600	300	-1300	-81%
Chetan	10 10 10	5000	5000	5000	15000	6500	-8500	-57%
		50	100	500				



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Fluctuating Gain		Morning	Mid	Evening	Investing	Selling	Gain	%gain
	Shares	100	2	200		200		
Abdul	30	3000	60	6000	3000	6000	3000	100%
Bikram	10	1000	20	2000	3020	6000	2980	99%
Chetan	10 10 10	5000	5000	5000	15000	515000	500000	3333%
		50	2500	25				



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Fluctuating Gain		Morning	Mid	Evening	Investing	Selling	Gain	%gain
	Shares	100	2	101		101		
Abdul	30	3000	60	3030	3000	3030	30	1%
Bikram	10	1000	20	1010	2030	3030	1000	49%
Chetan	10 10 10	5000	5000	5000	15000	262550	247550	1650%
		50	2500	49				



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Fluctuating Loss		Morning	Mid	Evening	Investing	Selling	Gain	%gain
	Shares	100	1000	2		2		
Abdul	30	3000	30000	60	3000	60	-2940	-98%
Bikram	10	1000	10000	20	11020	60	-10960	-99%
Chetan	10 10 10	5000	5000	5000	15000	5110	-9890	-66%
		50	5	2500				



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2. Which one of the following statements is always true?

- (1) Abdul will not be one with the minimum return
- (2) Return for Chetan will be higher than that of Bikram
- (3) Return for Bikram will be higher than that of Chetan
- (4) Return for Chetan cannot be higher than that of Abdul
- (5) **none of the above**

3. On a “boom” day the share price of XYZ Ltd. keeps rising throughout the day and peaks at the close of the day. Which trader got the minimum return on that day?

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Five horses, Red, White, Grey, Black and Spotted participated in a race. As per the rules of the race, the persons betting on the winning horse get four times the bet amount and those betting on the horse that came in second get thrice the bet amount. Moreover, the bet amount is returned to those betting on the horse that came in third, and the rest lose the bet amount. Raju bets Rs. 3000, Rs. 2000 and Rs. 1000 on Red, White and Black horses respectively and ends up with no profit and no loss.

Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1						6000
						6000
						6000

	Red	White	Black	Investment
Raju	3000	2000	1000	6000



Five horses, Red, White, Grey, Black and Spotted participated in a race. As per the rules of the race, the persons betting on the winning horse get four times the bet amount and those betting on the horse that came in second get thrice the bet amount. Moreover, the bet amount is returned to those betting on the horse that came in third, and the rest lose the bet amount. Raju bets Rs. 3000, Rs. 2000 and Rs. 1000 on Red, White and Black horses respectively and ends up with no profit and no loss.

Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1		White		R / B	B / R	6000
Case 2	Black		White			6000
Case 3		Black	Red			6000

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Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1		White		R/B	B/R	6000
Case 2	Black		White	R	R	6000
Case 3		Black	Red	W	W	6000

	Red	White	Black	Investment
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Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1	S / G	White	S / G	R/B	B/R	6000
Case 2	Black	S / G	White	R / S / G	R / S / G	6000
Case 3	S / G	Black	Red	W / S / G	W / S / G	6000

	Red	White	Black	Investment
Raju	3000	2000	1000	6000



1. Which of the following cannot be true?

- (1) At least two horses finished before Spotted
- (2) Red finished last
- (3) There were three horses between Black and Spotted
- (4) There were three horses between White and Red
- (5) Grey came in second

Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1	S / G	White	S / G	R/B	B/R	6000
Case 2	Black	S / G	White	R / S / G	R / S / G	6000
Case 3	S / G	Black	Red	W / S / G	W / S / G	6000

	Red	White	Black	Investment
Raju	3000	2000	1000	6000



2. Suppose, in addition, it is known that Grey came in fourth.

Then which of the following cannot be true?

- (1) Spotted came in first
- (2) Red finished last
- (3) White came in second
- (4) Black came in second
- (5) There was one horse between Black and White

Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1	S / G	White	S / G	R/B	B/R	6000
Case 2	Black	S / G	White	R / S / G	R / S / G	6000
Case 3	S / G	Black	Red	W / S / G	W / S / G	6000



3. Suppose, in addition, it is known that White came in Second. Then which of the following must be true?

- (1) Spotted came in first
- (2) Red finished last
- (3) Grey came in last
- (4) Grey came in first
- (5) Black or Red came in last

Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1	S / G	White	S / G	R/B	B/R	6000
Case 2	Black	S / G	White	R / S / G	R / S / G	6000
Case 3	S / G	Black	Red	W / S / G	W / S / G	6000



4. Suppose, in addition, it is known that Red came in last. Then which of the following must be true?

- (1) Spotted came in first or Second
- (2) White finished 3rd or 4th.
- (3) Grey came in last or 4th
- (4) Grey came in first or second
- (5) White finished 3rd or 2th

Raju	I x4	II x3	III x1	IV x0	Vx0	Return
Case 1	S / G	White	S / G	R/B	B/R	6000
Case 2	Black	S / G	White	R / S / G	R / S / G	6000
Case 3	S / G	Black	Red	W / S / G	W / S / G	6000



1. Which of the following cannot be true?

(1) At least two horses finished before Spotted

(3) There were three horses between Black and Spotted

(5) Grey came in second

(2) Red finished last

(4) There were three horses between White and Red

2. Suppose, in addition, it is known that Grey came in fourth. Then which of the following cannot be true?

(1) Spotted came in first

(3) White came in second

(5) There was one horse between Black and White

(2) Red finished last

(4) Black came in second

3. Suppose, in addition, it is known that White came in Second. Then which of the following must be true?

(1) Spotted came in first

(3) Grey came in last

(5) Black or Red came in last

(2) Red finished last

(4) Grey came in first

4. Suppose, in addition, it is known that Red came in last. Then which of the following must be true?

(1) Spotted came in first or Second

(3) Grey came in last or 4th

(5) White finished 3rd or 2th

(2) White finished 3rd or 4th.

(4) Grey came in first or second