# Truth & Lie

# Class 3

Mintu. Chintu and Pintu are aliens. each belonging to a different planet among Mars, Venus and Jupiter. The residents of one of the planets always lie, the residents of one of the planets always speak the truth, and the residents of the third planet alternate between speaking the truth and lie. in any order. When asked about the respective planets from which they were, each of them made the following statements:

### Mintu

 ${\tt Statement I: I always \, speak \, the \, truth.}$ 

 ${\tt Statement II: Pintuis not from Mars.}$ 

Chintu-

Statement I: Pintu is the truth teller.

Statement II: I am from Venus.

Pintu-

Statement I: Chintu is not the alternator.

Statement II: I am from Mars.

Q1 - Who among the three always tells the truth?

(A) Mintu

(B) Chintu

(C) Pintu

(D) Cannot be determined

Q2- The inhabitants of which planet always alternate between speaking the truth and a lie?

(A) Venus (B) Mars (C) Jupiter (D) Cannot be determined

Anil, who wanted to buy a car, had three options - Civic, Accord and Duster. He asked three of his friends - A, B and C about the price of these cars. Two of his friends were alternators, who always alternate between truth and lie, in any order. The third person was either a truth teller or a liar. A truth teller always tells the truth and a liar always lies. It is known that the prices of the cars were distinct. Following were the statements given by his friends:

### A:

- (1) Civic is costlier than Accord.
- (2) C always lies.
- (3) Duster is the costliest of all the three cars.

### B:

- (1) The cost of one of the cars was equal to the sum of costs of other two cars.
- (2) None of us always lies.
- (3) If the cost of each of the cars was divided by 100000, the resulting numbers, of which at least one is a single digit number, were squares of consecutive natural numbers.

### C:

- (1) The cost of Civic is the highest among the three options
- (2) A always lies
- (3) Civic is the cheapest among the three options.
- Q1. Who among the following is not an alternator?

[Type in '0' if your answer is CBD]

- Q2. Which of the following is the costliest car?
- a. Civic b. Accord c. Duster d. Cannot be determined
- Q3. What is the sum of prices of all the three cars?
- a. 1400000 b. 2900000 c. 5000000 d. Cannot be determined
- Q4. What is the total number of true statements given by the friends A and C?
- a. 1 b. 2 c. 3 d. Cannot be determined

Four participants - Abhi, Bablu, Chintu and Dubey - of a chess tournament reached the semi-final. Among these, exactly 2 are male and 2 are female. Also, one male participant and one female participant are citizens of Australia. One male participant is a USA citizen and one female participant is an Indian citizen. When asked about their citizenshi, each of them give three statements. It is known that one of them always tells the truth (Truthteller), one of them always tells lies (Liar) and the remaining two persons alternate between truth and lies (Alternator), in any order. Abhi:

- 1) Chintu and Dubey are from the same country.
- 2) Bablu is the Indian.
- 3) Dubey is not the male Australian.
- Bablu:
- 1) Chintu is the male Australian.
- 2) Dubey is the female Australian.
- 3) I am the USA citizen.

### Chintu:

- 1) I am the female Australian.
- 2) Abhi is not the USA citizen.
- 3) Bablu is the Indian.

### Dubey:

- Abhi is the USA citizen.
- 2) Chintu is the USA citizen.
- 3) Bablu is the Indian.
- Q1. Who is the male Australian?
- Q2. Who is the Indian?
- Q3. Who is the liar?
- Q4. Who is the female Australian?

Four friends namely Sandeep, Ravi, Laxman and Vikas. Each of whom has a different colored car from among black. white. violet and red. not necessarily in the same order. belong to three categories of persons (at least one from each category) - truth teller. alternator and liar. A truth teller always speaks the truth: an alternator makes a true statement followed by a false one or vice versa: and a liar always speaks a lie. It is known that out of the four, two are alternators. When these four persons were enquired regarding the colors of their cars, each of them made two statements, the details of which are as follows:

Laxman: The color of my car is either black or white. The black colored car is either Sandeep's or mine.

Vikas: The color of my car is neither black nor white. The red colored car is neither Ravi's nor mine.

Sandeep: The color of Vikas's car is red. Ravi is a truth teller.

Ravi: The color of my car is red. The color of Sandeep's car is not violet.

Q1. Who among the following cannot be a truth teller?

a. Vikas b. Sandeep c. Ravi d. Laxman

Q2. If the color of Vikas's car is white, then the color of whose car is violet?

a. Ravi b. Laxman c. Sandeep d. Cannot be determined

Q3. If the color of Laxman's car is black, then the color of whose car is red?

a. Vikas b. Ravi c. Sandeep d. Cannot be determined

Each of the four friends - Akshaya, Bhavya, Chaitanya & Divya decided to attend a party in a different attire: Churidar, Sari, Salwar kameez & Gagra choli, but not necessarily in that order. When one of their friends asked them about the dress which they wear, each one of them made three statements. Atleast one person among them is a truth teller (who always speaks the truth). At least one person among them is a liar (who always lie). Atleast one among them is an alternator (who alternates between the truth and lie). Their replies were as follows.

### Akshaya:

- I wear a churidar.
- · Bhavya wears sari.
- Divya doesn't wear Salwar Kameez.

### Bhavya:

- I wear a Salwar Kameez.
- Chaitanya wears a Gagra choli.
- Akshaya doesn't wear Sari.

### Chaitanya:

- I wear Sari.
- Akshaya wears Salwar Kameez.
- · Bhavya wears churidar.

### Divva:

- I doesn't wear Salwar Kameez.
- · Chaitanya doesn't wear Sari.
- · Akshaya wears Churidar.
- Q1. If Chaitanya wears Gagra choli, then who wears the salwar kameez?
- Q2. Who is definitely a truth teller?
- Q3. The alternator wears?
- Q4. Salwar kameez is worn by?

Mention'0', if your answer is CBD - For all questions.