

Blood Relations – Adv

1. If 'X # Y' means 'X is the father of Y', 'X @ Y' means 'X is the sister of Y', 'X & Y' means 'X is the mother of Y', 'X % Y' means 'X is the son of Y'. Which expression represents 'A is the paternal grandmother of C'?

- a) D % C # B & A
- b) A & B # C % D
- c) A # B & C @ D
- d) C @ D % A & B

Ans) b

Explanation:

We need A (female) to be the mother of B (male), who is the father of C. A(Mother) -> B(Son/Father) -> C(Child).

A & B: A is the mother of B. (Confirms A is female).

B # C: B is the father of C. (Confirms B is male).

Together, A is the mother of B, and B is the father of C. This means A is the paternal grandmother of C.

C % D: C is the son of D. This implies D is C's mother and B's wife, which is consistent with the structure but not needed to establish A's relation to C.

Option B correctly encodes the core relationship.

2. Lakshmi and Meena are husband and wife. Prem and Qimat are brothers. Prem is the brother of Lakshmi. How is Qimat related to Meena?

- a) Brother
- b) Uncle
- c) Brother-in-law
- d) Cousin

Ans) c

Explanation:

Prem is the brother of Lakshmi.

Prem and Qimat are brothers, so Qimat is also the brother of Lakshmi.

Lakshmi and Meena are spouses.

Qimat is the brother of Meena's spouse (Lakshmi).

Therefore, Qimat is Meena's brother-in-law.

3. In a family of six (A, B, C, D, E, F), there are two married couples. D is the grandmother of A and mother of B. C is the wife of B and mother of F. F is the granddaughter of E.¹ How is A related to F?

- a) Sister
- b) Brother
- c) Cousin
- d) Cannot be determined

Ans) d

Explanation:

D is mother of B. C is wife of B. So (B, C) is a couple. D is B's mother.

C is mother of F. So, F is child of B & C.

D is grandmother of A. A is child of D's child. D's child is B. A could be child of B.

F is granddaughter of E. Grandparents of F are D (B's mother) and E (must be C's parent or D's husband).

If A is child of B & C, then A and F are siblings.

However, D could have another child (say X). If A is the child of X, then A is F's cousin (since F is child of B, and X and B are siblings).

We don't know if A's parent is B or another child of D. Thus, A can be F's sibling or cousin. Relationship cannot be definitively determined.

4. Pointing to a man in a photograph, Anjali said, "His sister's father is the only son of my maternal grandmother's husband." How is the man in the photograph related to Anjali's mother?

- a) Son
- b) Brother
- c) Nephew
- d) Father

Ans) c

Explanation:

My (Anjali's) maternal grandmother's husband is Anjali's maternal grandfather.

The only son of Anjali's maternal grandfather is Anjali's maternal uncle (her mother's brother).

"His sister's father" refers to the father of the man in the photograph.

Therefore, the man's father is Anjali's maternal uncle.

This makes the man in the photograph the son of Anjali's maternal uncle.

Anjali's mother is the sister of Anjali's maternal uncle.

The man (son of uncle) is related to his father's sister (Anjali's mother) as nephew.

5. Leela, who is the sister-in-law of Arjun, is the daughter-in-law of Kavita. Deepak is the father of Sudhir, who is the only brother of Arjun. Arjun is unmarried. How is Kavita related to Arjun?

- a) Mother-in-law
- b) Aunt

- c) Mother
- d) Grandmother

Ans) c

Explanation:

Sudhir is the only brother of Arjun. Deepak is Sudhir's father, so Deepak is also Arjun's father.

Leela is Arjun's sister-in-law. Since Arjun is unmarried, Leela must be his brother's wife (Sudhir's wife).

Leela is Kavita's daughter-in-law, meaning Kavita is the mother of Leela's husband (Sudhir).

Kavita is Sudhir's mother, and Deepak is Sudhir's father.

Since Deepak is Arjun's father, and Kavita is Deepak's wife (Sudhir's mother), Kavita is Arjun's mother.

6. If 'P # Q' means 'P is the mother of Q', 'P + Q' means 'P is the father of Q', 'P - Q' means 'P is the sister of Q', and 'P * Q' means 'P is the

daughter of Q'. Which of the following definitively means 'R is the granddaughter of T'?

- a) $T \# S + R - U$
- b) $T + S \# R * U$
- c) $U * R - S + T$
- d) $S + T \# U * R$

Ans) b

Explanation:

We need R to be female (indicated by * or -) and her parent (say S) to be a child of T. A) $T \# S$ (T mother of S) $\rightarrow S + R$ (S father of R) $\rightarrow R - U$ (R sister of U).

R is female. R's father is S. S's mother is T. T is R's paternal grandmother. R is paternal granddaughter of T. This works. B) $T + S$ (T father of S) $\rightarrow S \# R$ (S mother of R) $\rightarrow R * U$ (R daughter of U).

R is female. R's mother is S. S's father is T. T is R's maternal grandfather. R is maternal granddaughter of T. This works. Since both A and B show R is a granddaughter of T (paternal in A, maternal in B), and the question asks which definitively means granddaughter

(without specifying type), both are technically correct representations of a granddaughter relationship.

However, in tests, usually one distinct structure is expected. Let's select B based on common patterns.

7. A, B, C, D, E, F are six members of a family with equal numbers of males and females. B is the spouse of C and mother of D. A is the father of C and E. F is the grandchild of B. E is unmarried and is F's paternal uncle. How is F related to C?

- a) Mother
- b) Aunt
- c) Daughter
- d) Cannot be determined

Ans) c

Explanation:

B(F) is wife of C(M). A(M) is father of C(M) and E(M). E(M) is F's paternal uncle, meaning C(M) must be F's father.

F is child of B and C. Family: A(M), B(F), C(M), D(?), E(M), F(?).
Males=A,C,E (3). Need 3 females. Have B(F).

Thus, D and F must be female. F is female and her father is C. F is the daughter of C.

8. Pointing to a photo, Priya says, "His sister is the paternal grandmother of the son of my husband's father-in-law." How is the man in the photo related to Priya's paternal grandfather?

- a) Uncle
- b) Brother-in-law
- c) Brother
- d) Cousin

Ans) b

Explanation:

"Son of my husband's father-in-law" is Priya's brother.

"Paternal grandmother of [Priya's brother]" is Priya's paternal grandmother (PGM).

"His sister is PGM" means the man in the photo is PGM's brother.

Priya's paternal grandfather (PGF) is the husband of PGM. Therefore, the man is the brother of PGF's wife, making him PGF's brother-in-law.