1) INNER JOIN returns only matching rows from both tables. LEFT JOIN returns all rows from the left table plus matching rows from the right table (NULLs for non-matches).

2) CROSS JOIN is used for: availability matrices, generating test data, creating all possible combinations (like sizes × colors), or calendar planning.

3) ON conditions filter before the join (affecting which rows are joined), WHERE filters after the join. For INNER JOIN doesn’t matter – the result is the same, while for OUTTER JOINs it matters because it determines when the filter is applied, which changes whether you preserve or discard the non-matching rows.

4) 50 rows (5 × 10 = 50) - the Cartesian product of both tables.

5) NATURAL JOIN automatically joins on columns with the same name and compatible data types in both tables.

6) Risks: Schema changes break queries, implicit behavior is hard to debug, joins on unexpected columns, reduced code clarity.

7) SELECT \* FROM B RIGHT JOIN A ON B.id = A.id

8) FULL OUTER JOIN when you need all records from both tables - matching records plus unmatched records from both sides with NULLs for missing matches.