## Centum Preparation 100 Days plan class 12 Maths

Q.N	DAY 70
0.	DAY - 79
490	10. (i) Let $A$ be $\mathbb{Q} \setminus \{1\}$ . Define $*$ on $A$ by $x * y = x + y - xy$ . Is $*$ binary
	on $A$ ? If so, examine the commutative and associative properties satisfied
	by $*$ on $A$ .
	(ii) Let $A$ be $\mathbb{Q} \setminus \{1\}$ . Define $*$ on $A$ by $x * y = x + y - xy$ . Is $*$ binary
	on $A$ ? If so, examine the existence of identity, existence of inverse properties for the operation $*$ on $A$ .
491	Example 12.13
	How many rows are needed for following statement formulae?
	(i) $p \lor \neg t \land (p \lor \neg s)$ (ii) $((p \land q) \lor (\neg r \lor \neg s)) \land (\neg t \land v)$
492	Example 12.16
	Construct the truth table for $(p \nabla q) \wedge (p \nabla \neg q)$ .
493	Example 12.17
	Establish the equivalence property: $p \rightarrow q \equiv \neg p \lor q$
494	Example 12.18
	Establish the equivalence property connecting the bi-conditional
	with conditional: $p \leftrightarrow q \equiv (p \rightarrow q) \land (q \rightarrow p)$