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1.	Rewrite the statement by finding its converse, inverse, and contrapositive: *"A plant grows whenever there is sunlight."*
2.	Express the following statements using predicates and quantifiers (Domains are all animals): i) All animals in the zoo are well-fed. ii) There is an animal in the zoo that is not nocturnal.
3.	**Let X, Y,and Z be the propositions:** • X: You pass the midterm exam. • Y: You complete all the assignments. • Z: You pass the course. Write these propositions using x, y, and z and logical connectives (including negations): a. You pass the course, but you do not complete all the assignments. b. You pass the midterm, you complete all the assignments, and you pass the course. c. To pass the course, it is necessary for you to pass the midterm exam. d. You pass the midterm, but you don't complete all the assignments; nevertheless, you pass the course. e. Passing the midterm and completing all assignments is sufficient for passing the course.
4.	Find the DNF of following expression $p \vee (q \rightarrow \neg r)$
5	Show that **pv (q ∧r)** and **(pvq) ∧(pvr)** are logically equivalent.