Truth table question for the first assignment

Use truth tables to

(1) show that $(P \Leftrightarrow Q) \Leftrightarrow [(P \wedge Q) \vee (\neg P \wedge \neg Q)]$ is a tautotology;
(2) show that $P \Rightarrow (Q \vee R)$ is logically equivalent to $(P \Rightarrow Q) \vee (P \Rightarrow R)$;
(3) explain why $(P \Rightarrow Q) \wedge (Q \Rightarrow \neg P)$ is not a contradiction.