Challenge Proof:

Given the following premises:

1. $(X \vee Y) \supset (Y \vee Z)$
2. $X \wedge (Y \supset \neg Y)$
3. $Z \supset \neg Z$

Derive the following conclusion:

$\therefore \neg Y \vee \neg Z$

If you hand me a correct derivation, I will add 3 points to your final quiz.