

Here is a previous example of a step 5 quiz. As with the step 5 exercises, it requires some combination of using both the rules of inference and the rules of replacement. Using the three strategies on page 444 is highly recommended. See if you can finish the practice quiz in 20 minutes.

**Step 5 Quiz:** Justify each line that is not a premise.

1.  $(A \supset B) \supset [X \vee (P \bullet S)]$

2.  $P \supset \sim Y$

3.  $A \equiv B$

4.  $X \supset Y$  /  $\therefore X \equiv Y$

5.  $(A \supset B) \bullet (B \supset A)$

6.  $A \supset B$

7.  $X \vee (P \bullet S)$

8.  $(X \vee P) \bullet (X \vee S)$

9.  $X \vee P$

10.  $\sim X \supset P$

11.  $\sim X \supset \sim Y$

12.  $Y \supset X$

13.  $(X \supset Y) \bullet (Y \supset X)$

14.  $X \equiv Y$