

2.21.1. Indirect Test of Validity: Simple Problems

For each of the following arguments, use the **indirect test** to show whether or not the argument is **valid**.

1. $\sim P \therefore \sim(P \wedge Q)$

2. $(P \wedge \sim Q) \cdot \sim R \therefore (Q \vee R)$

3. $\sim(P \vee Q) \cdot (R \wedge \sim S) \therefore (Q \vee R)$

4. $(R \wedge \sim S) \therefore (Q \vee R)$

5. $\sim(P \wedge Q) \cdot P \therefore \sim Q$

(Break down “ $\sim Q$ ” first.)

6. $\sim(P \wedge Q) \cdot \sim Q \therefore P$

(Break down “ $\sim Q$ ” first.)