

1. Write a 2-column proof for each of the following arguments.

$$(a) \frac{\begin{array}{l} p \rightarrow q \\ \neg(q \wedge r) \\ r \end{array}}{\therefore \neg p}$$

$$(b) \frac{\begin{array}{l} t \rightarrow p \\ s \vee t \\ p \rightarrow q \\ \neg q \end{array}}{\therefore s}$$

2. Invent your own proof for a valid argument by creating a set of premises that relate to one another and then deducing a conclusion using a 2-column proof.