

Proofs Practice
Math 102

$$\text{Argument: } \frac{a \rightarrow \sim b \quad b \vee c \quad a}{\therefore c}$$

Statement

Reason

1. $a \rightarrow \sim b$
2. $b \vee c$
3. a
4. $\sim b$
5. $\therefore c$

$$\text{Argument: } \frac{\sim g \rightarrow h \quad g \rightarrow r \quad \sim h}{\therefore r}$$

Statement

Reason

1. $\sim g \rightarrow h$
2. $g \rightarrow r$
3. $\sim h$
4. g
5. $\therefore r$

$$\text{Argument: } \frac{(m \wedge s) \rightarrow \sim \ell \quad \ell \quad t \rightarrow s \quad m}{\therefore \sim t}$$

Statement

Reason

1. $(m \wedge s) \rightarrow \sim \ell$
2. ℓ
3. $t \rightarrow s$
4. m
5. $\sim (m \wedge s)$
6. $\sim m \vee \sim s$
7. $\sim s$
8. $\sim s \rightarrow \sim t$
9. $\therefore \sim t$