

Use the
 existential assumption
 to derive this inference:

$$\frac{r \models \neg f \quad s \models r}{s \not\models f}$$

No reptiles have fur.
 All snakes are reptiles
 \therefore Some snakes have no fur.

We use the existential assumption, $\overline{s \not\models \neg s}$, together with instances of *darri* and *ferio* to construct the following derivation:

$$\frac{m \models \neg p \quad s \not\models \neg m}{s \not\models p} \text{ferio} \qquad \frac{r \models \neg f \quad \frac{s \models r \quad \overline{s \not\models \neg s}}{s \not\models \neg r}}{s \not\models f} \qquad \frac{m \models p \quad s \not\models \neg m}{s \not\models \neg p} \text{darri}$$

In standard form this is,

$$\frac{m \models \neg p \quad s \models m}{s \not\models p} \text{celaront}$$