

```

┆ ∀[P,Q:ℙ]. ((¬P) ∨ Q) ⇒ P ⇒ Q
|
BY RepeatFor 2 ((UD THENA Auto))
|
[1]. P: ℙ
[2]. Q: ℙ
┆ ((¬P) ∨ Q) ⇒ P ⇒ Q
|
BY RepeatFor 2 ((D 0 THENA Auto))
|
3. (¬P) ∨ Q
4. P
┆ Q
|
BY D 3
| \
| 3. ¬P
| ┆ Q
| |
1 BY (Unfold 'not' 3 THEN D 3)
| | \
| | 3. P
| | ┆ P
| | |
1 2 BY NthHyp 3
| | \
| | 3. P
| | 4. False
| | ┆ Q
| | |
1 BY FalseHD 4
| \
| 3. Q
| ┆ Q
|
BY NthHyp 3

```

```

Extract: λf,p. case f of inl(np) => any (np p) | inr(q) => q
  where f : (¬P) ∨ Q
         p : P
         np : ¬P ≡ (P ⇒ False)
         q : Q

```