

# Section 5 Solutions – Theorem Proving in Lean

## 4

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```
example (p q r : Prop) (hp : p)
  : (p v q v r)  $\wedge$  (q v p v r)  $\wedge$  (q v r v p) := by
  apply And.intro
  apply Or.inl
  exact hp
  apply And.intro
  apply Or.inr
  apply Or.inl
  exact hp
  apply Or.inr
  apply Or.inr
  exact hp
```