

Quiz 1b

Math 2130 Fall 2025

29 August 2025

Name 1 _____

☐

Initial in the box to give me permission to check my grading of your work using AI. Whether you opt in or not, your name will not be submitted to any AI.

Name 2 _____

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Initial in the box to give me permission to check my grading of your work using AI. Whether you opt in or not, your name will not be submitted to any AI.

Instructions : work in your group, using only a writing implement. Make sure your full names are written above.

4. What is the Lean state at the marked position below? Make sure to include all goals (hint: there might be more than one), and all knowledge for each goal.

```
1 variable ( P Q R : Prop )
2
3 example ( h : P ∨ Q → R ) : ( P → R ) ∧ ( Q → R ) := by
4   apply And.intro
5     intro h1
6     apply h
7     /- Marked position -/
8     apply Or.intro_left
9     exact h1
10    intro h2
11    apply h
12    apply Or.intro_right
13    exact h2
```