Proof Notebook Problem 1

The Problem:

Prove that the function f (or g), below, is injective.

$f: \mathbb{R} \to \mathbb{R}$ $g: \mathbb{R} \to \mathbb{R}$

    $x \mapsto 2x + 3$ $x \mapsto 5x + 6$

Due Dates:

Item	Due Date	Method
Draft 1	Friday, August 22 (10pm)	Blackboard
Peer Review 1	Before 2nd draft	On your own – nothing to turn in
Draft 2	Tuesday, August 26	In class
Draft 3	Friday, August 29 (10pm)	Blackboard
Peer Review 2	Before final version draft	On your own – nothing to turn in
Final Version	Tuesday, September 2	In class

The peer review process:

1. Schedule a time to meet. Come to the meeting with draft 1 completed. One person should plan to do f, while the other person plans to do g.
2. Person 1 presents their proof on the board; Person 2 analyzes each step:
    1. Is this step intelligible or nonsense?
    2. Does this step say what the Person 1 thinks it says?
    3. Does this step follow from the previous steps?
    4. Is it clear why this step follows?
3. Switch roles and repeat (2).