

Exercise 6

Task 1

Which of the following statements are correct? Give reasons for your answer.

- (a) (\mathbb{N}, \leq) is automatically presentable.
- (b) Let $M \subseteq \mathbb{N}$ (unary relation), then (\mathbb{N}, M) is automatically presentable.
- (c) If (\mathbb{N}, R_1) and (\mathbb{N}, R_2) are automatically presentable, then (\mathbb{N}, R_1, R_2) is automatically presentable.

Task 2

Are any two countable linear orders without a smallest and a largest element isomorphic?