

## Homework 2

Due: 9/19

**Note:** Your answers must be accurate and unambiguous. Otherwise, points will be deducted.

**Problem 1 (10 points).** Answer the following questions.

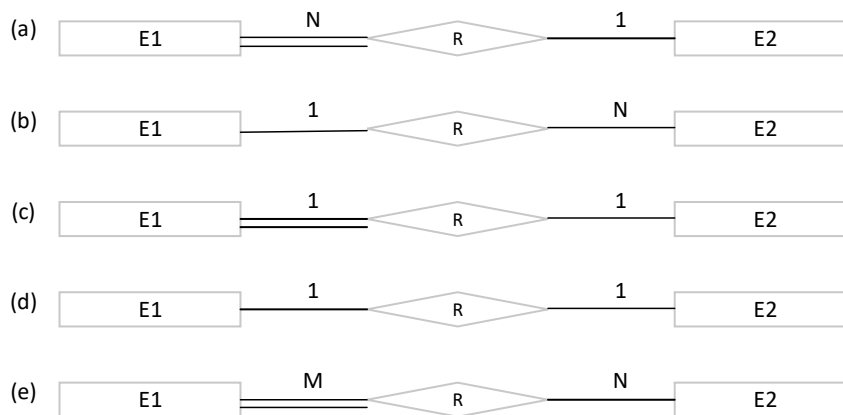
- (1). Describe the difference between *composite attribute* and *multi-valued attribute*. Show one example of each type.
- (2). Describe the difference between *stored attribute* and *derived attribute*. Show one example of each type.
- (3). Describe the difference between *entity* and *entity type*.
- (4). Describe the difference between *relationship instance* and *relationship type*.

**Problem 2 (10 points).**

- (1). Explain what a *recursive relationship type* means.
- (2). Show a real-world example of recursive relationship type (don't use examples in the textbook).

**Problem 3 (10 points).** A *weak entity type* can have more than one owner entity type. Show a real-world example of a weak entity type that has two owner entity types.

**Problem 4 (10 points).** Convert the constraints in the following diagrams to (min, max) notation.



Include all answers in a single file and name it *LastName\_FirstName\_Hw2.doc* or *LastName\_FirstName\_Hw2.pdf* and submit it to Blackboard.