

Exercise 2:

2.

a) 3 Binary Relationship Sets

This model does not capture all constraints. Even though it captures the direct relationships, it does not enforce the constraint that an instructor can only give a lesson to a student they are assigned to.

b) Ternary Relationship Set

This model does indeed capture all constraints. The ternary relationship enforces that only one student and one instructor participate in a given driving lesson.

c) Aggregation

This model captures all constraints. Aggregation allows the driving lesson to be directly connected to an existing assignment between a student and an instructor. This ensures that only an instructor assigned to a student can give them a lesson. The Assignment entity effectively represents valid student-instructor relationship.