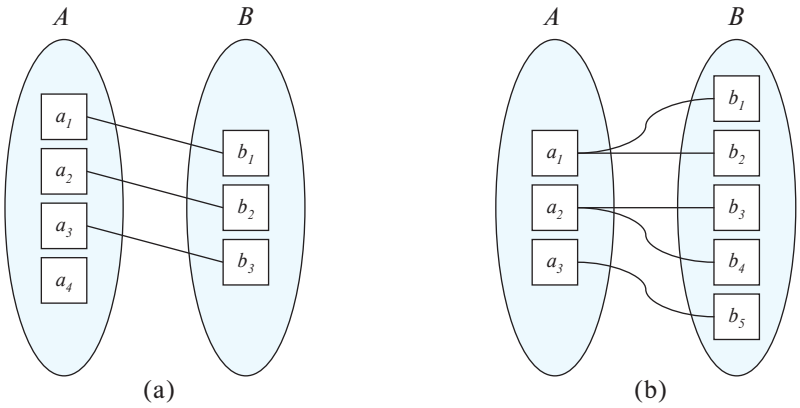

Figure 6.9 Mapping cardinalities. (a) One-to-one. (b) One-to-many.

- **Many-to-many**. An entity in A is associated with any number (zero or more) of entities in B, and an entity in B is associated with any number (zero or more) of entities in A. (See Figure 6.10b.)

The appropriate mapping cardinality for a particular relationship set obviously depends on the real-world situation that the relationship set is modeling.

As an illustration, consider the *advisor* relationship set. If a student can be advised by several instructors (as in the case of students advised jointly), the relationship set is many-to-many. In contrast, if a particular university imposes a constraint that a student can be advised by only one instructor, and an instructor can advise several students, then the relationship set from *instructor* to *student* must be one-to-many. Thus, mapping

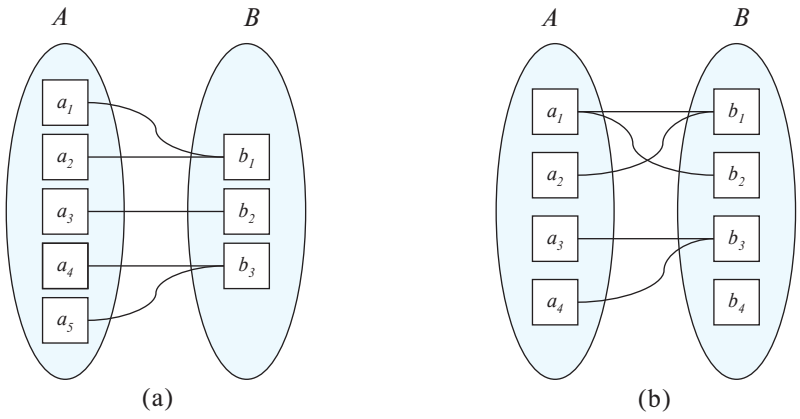

Figure 6.10 Mapping cardinalities. (a) Many-to-one. (b) Many-to-many.