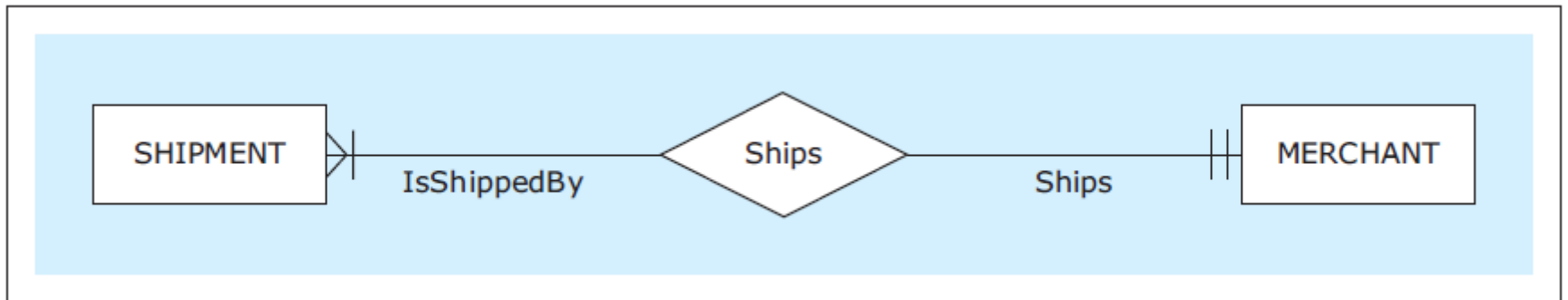# IT 775
Database Technology

ER Modeling
Degree of Relationship

RELATIONSHIPS

- **Degree of a relationship -** reflects how many entities are involved in the relationship

- **Binary relationship** - relationship between two entities
(*degree 2 relationship*)

- **Unary relationship (recursive relationship)** - occurs when an entity is involved in a relationship with itself
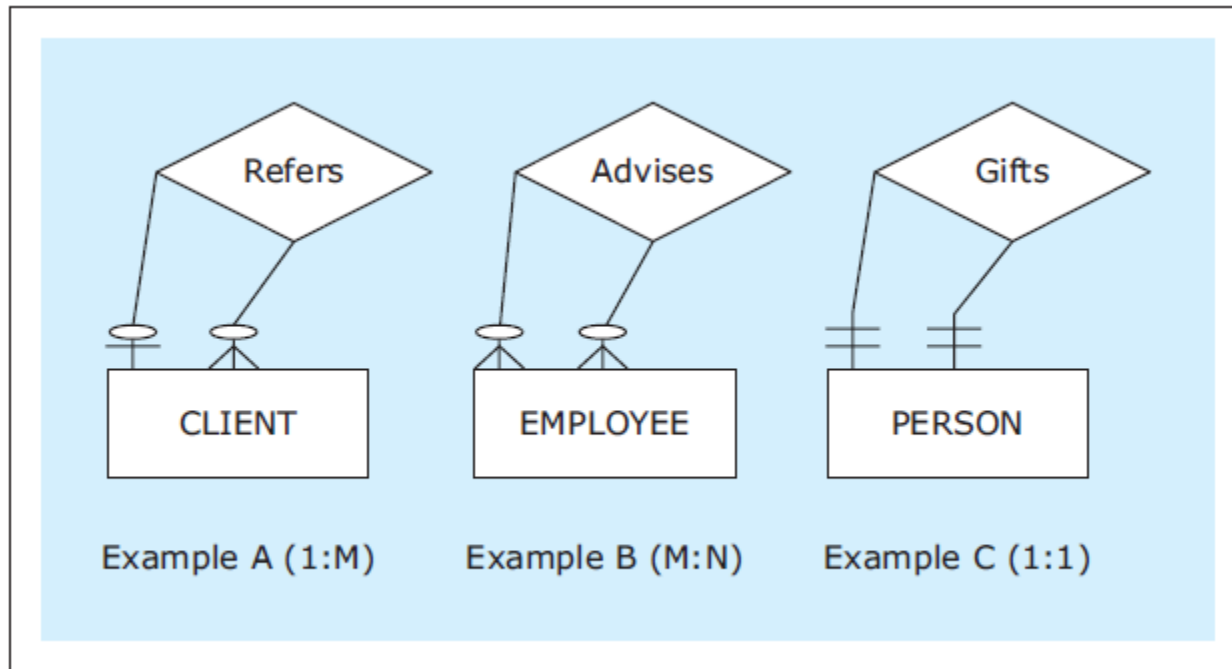(*degree 1 relationship*)

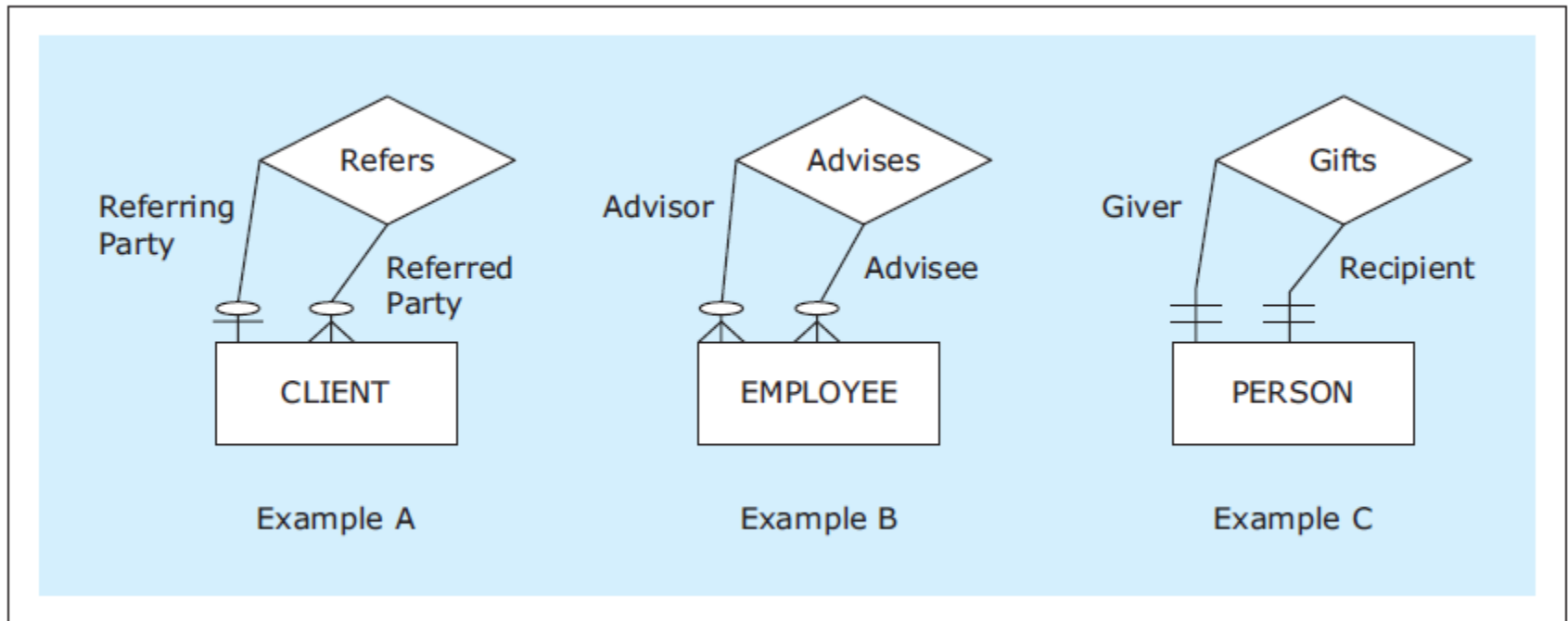# RELATIONSHIPS

A binary relationship with role names

RELATIONSHIPS

Unary relationship examples

Example A (1:M)   Example B (M:N)   Example C (1:1)

RELATIONSHIPS
Unary relationships with role names

Example A
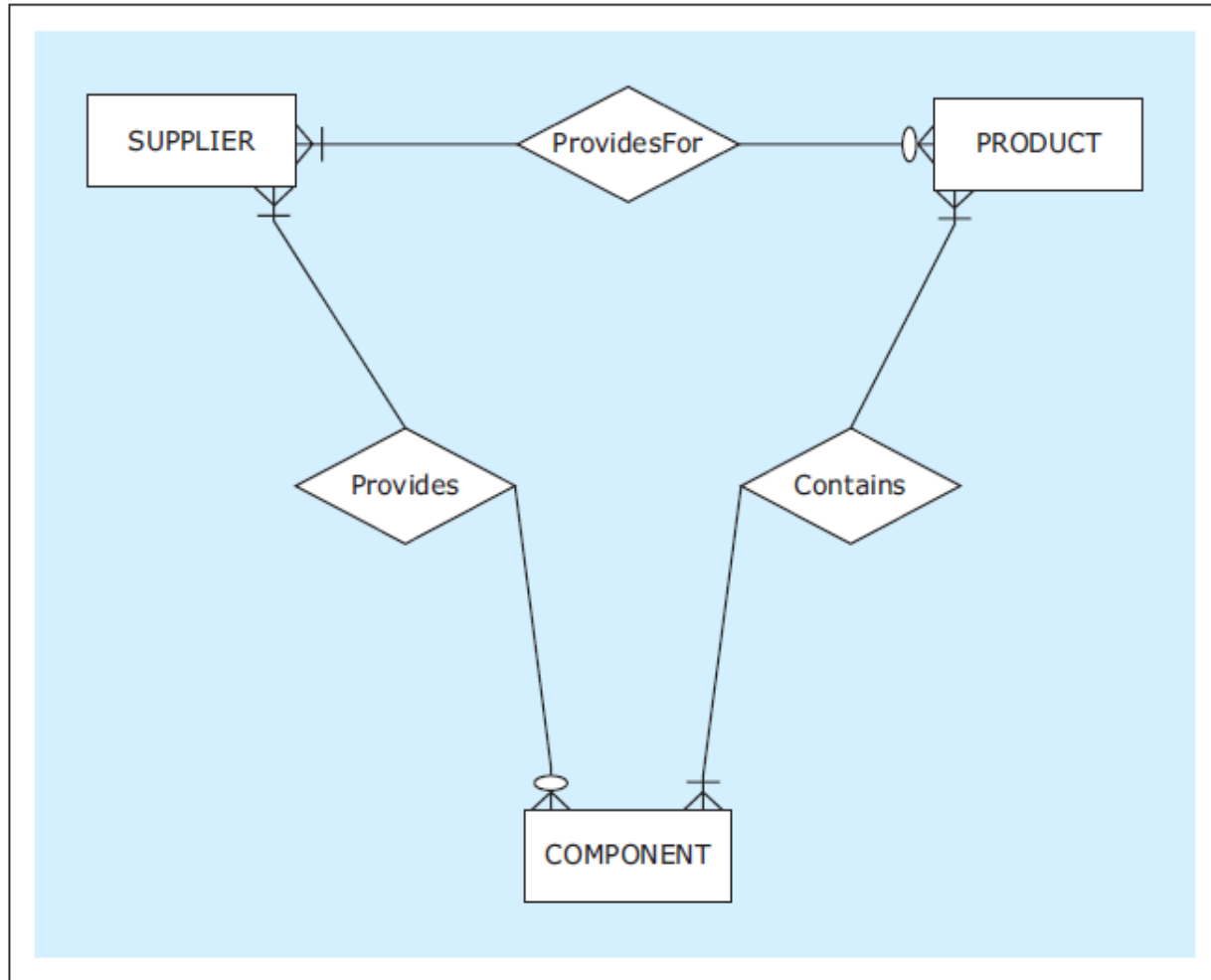
Example B

Example C

TERNARY RELATIONSHIP

- **Ternary relationship -** relationship involving three entities *(degree 3 relationship)*
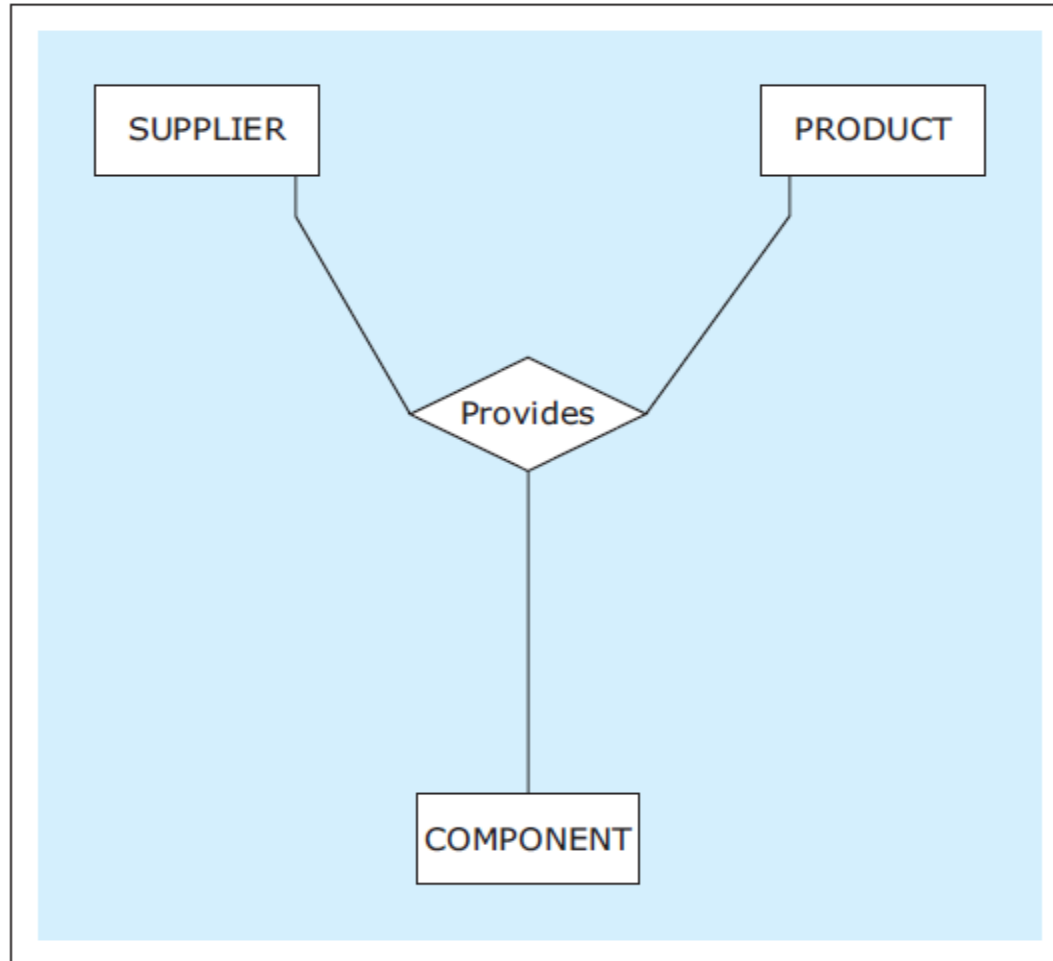
TERNARY RELATIONSHIP

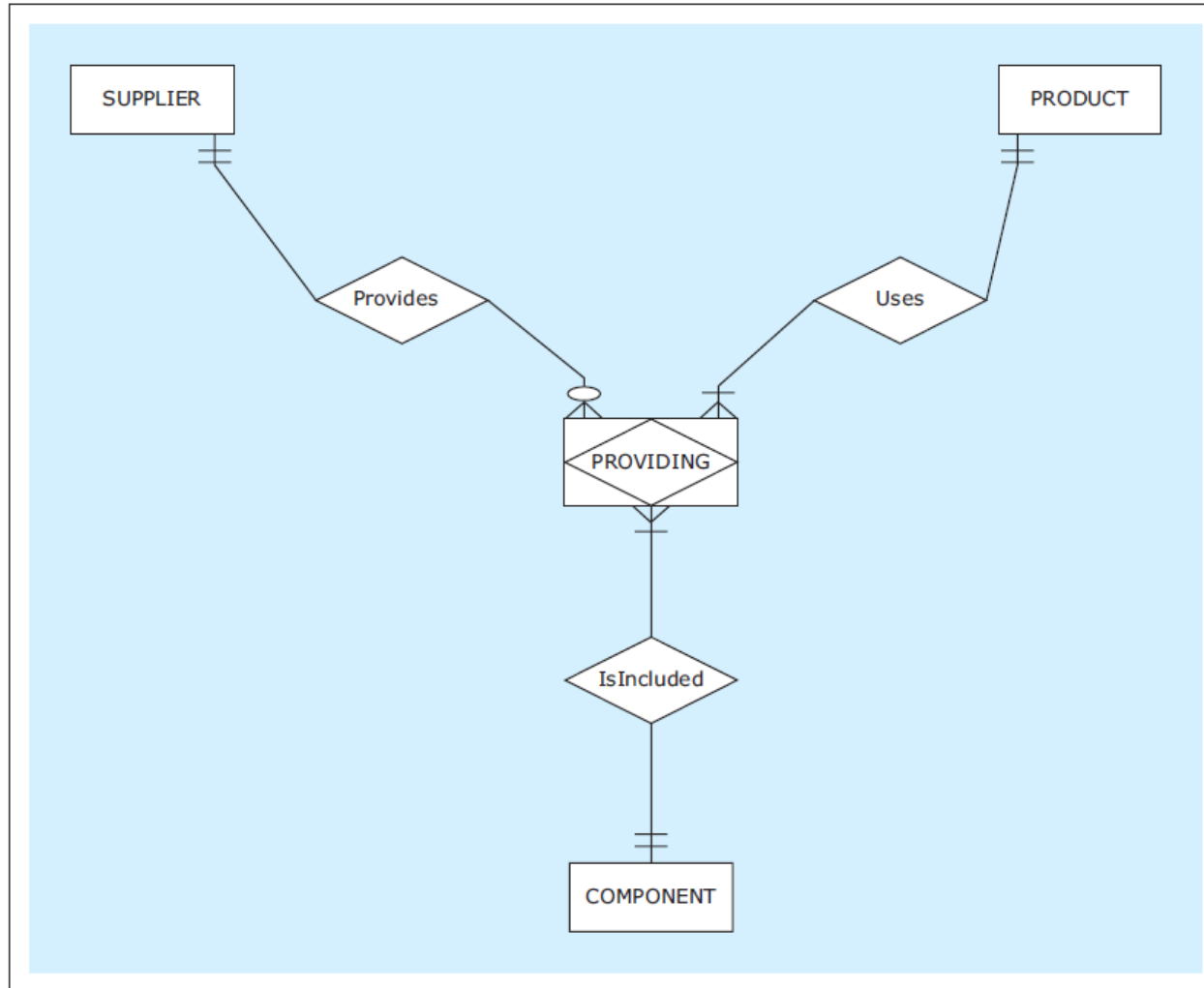Three binary relationships that are insufficient for depicting given requirements
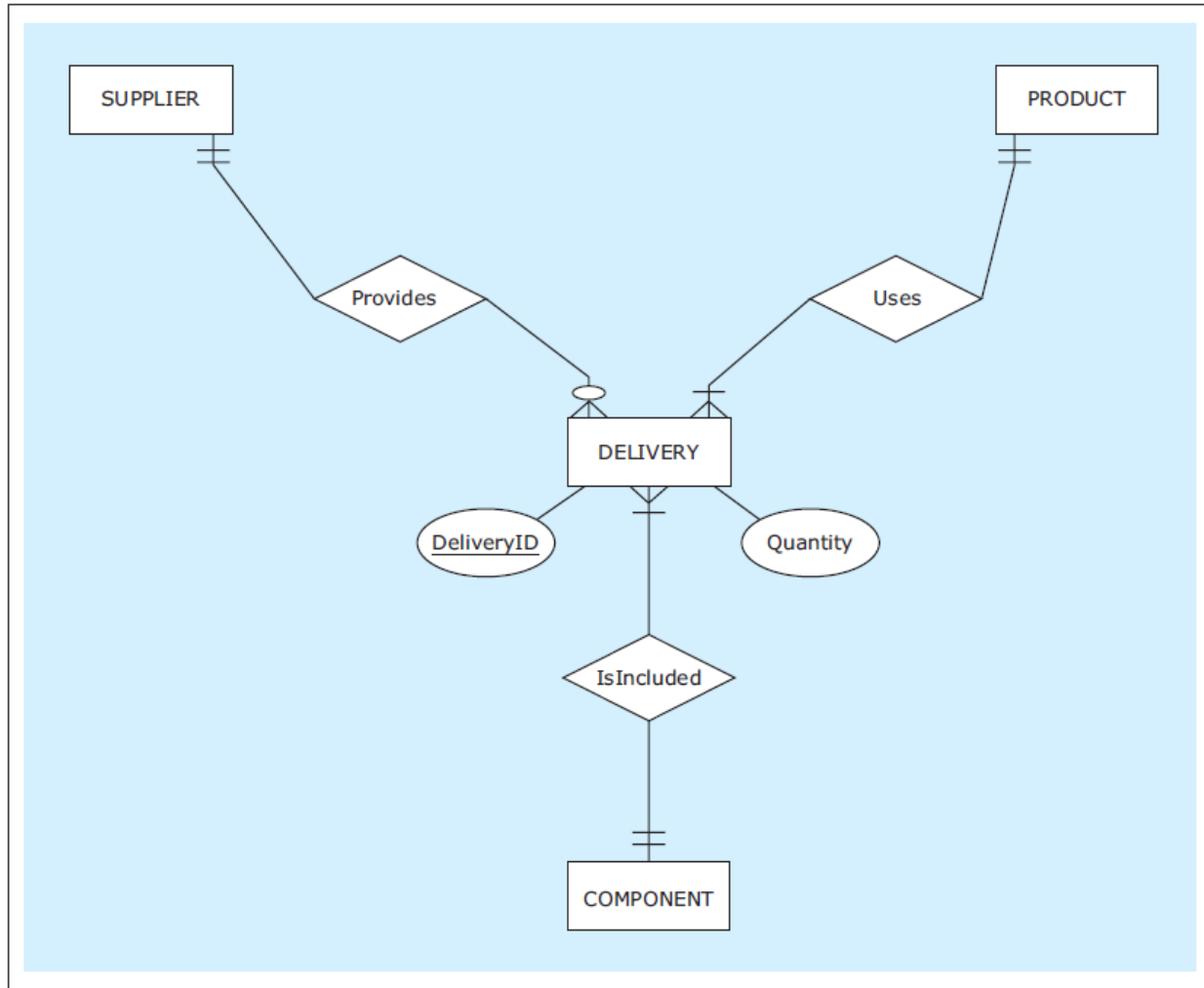
TERNARY RELATIONSHIP

A ternary relationship

TERNARY RELATIONSHIP

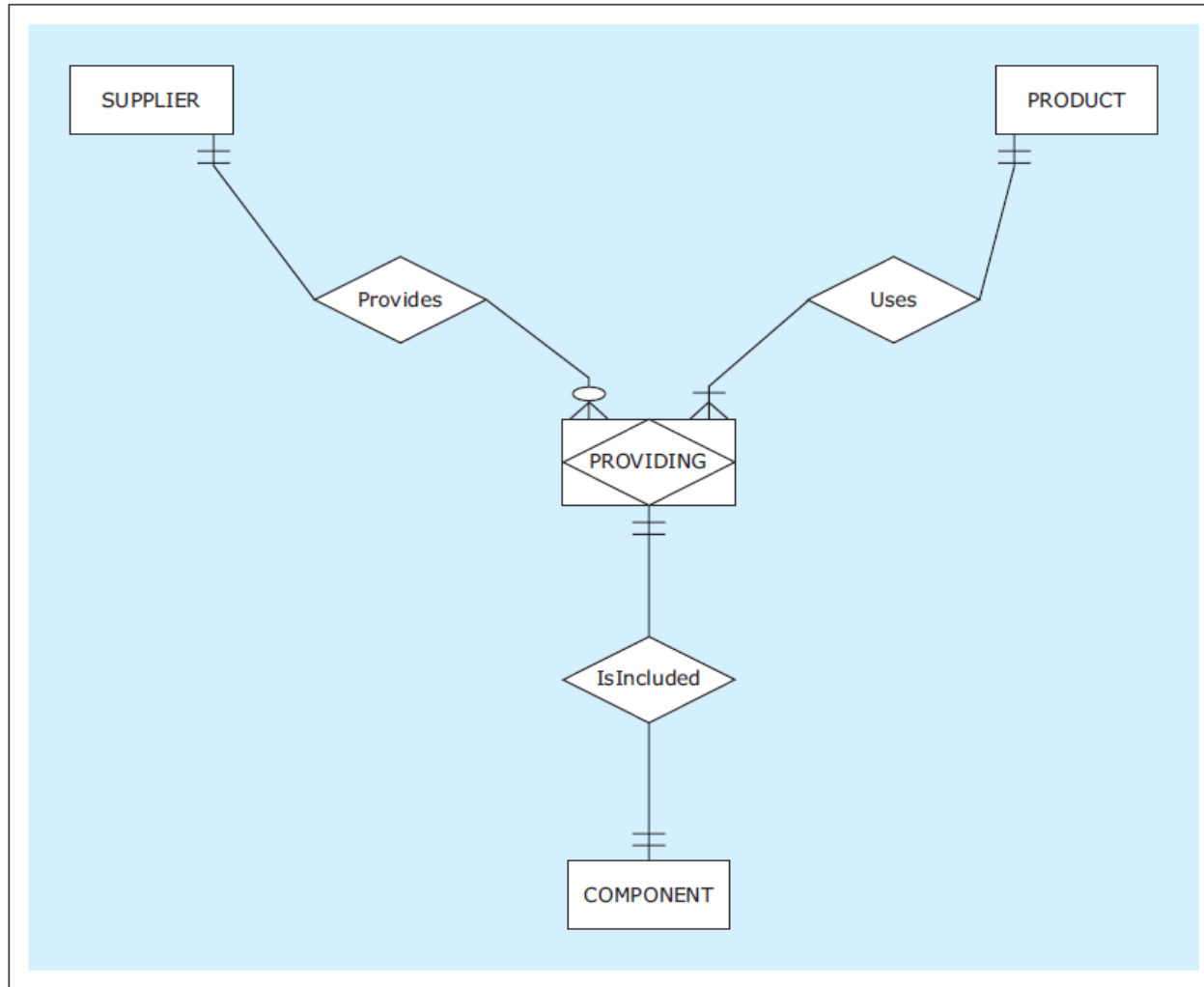## A ternary relationship via associative entity

TERNARY RELATIONSHIP

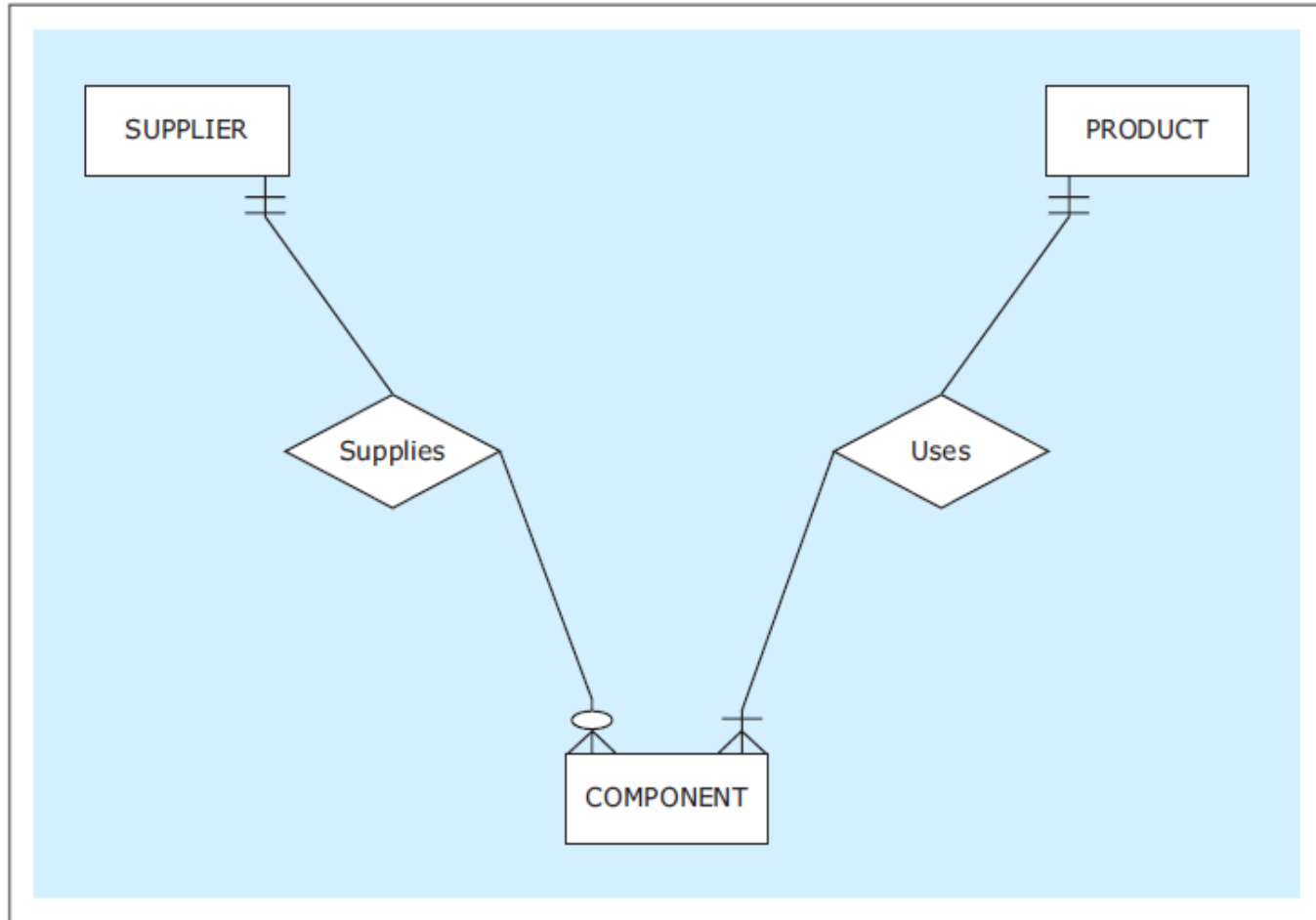A regular entity replacing a ternary relationship

TERNARY RELATIONSHIP

A many-to-many-to-one ternary relationship

TERNARY RELATIONSHIP

A many-to-many-to-one ternary relationship

TERNARY (AND HIGHER DEGREE) RELATIONSHIPS

- In practice, ternary relationships are relatively rare, and relationships of degree higher than 3 are rarer still