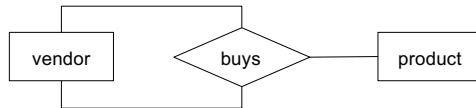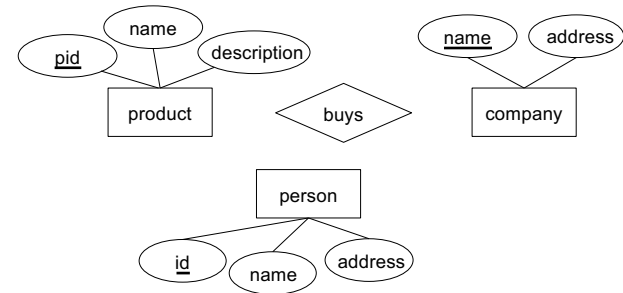# Let's try: Self-Referential

Given the following E-R diagram. Come up with an example that can be represented by the diagram.
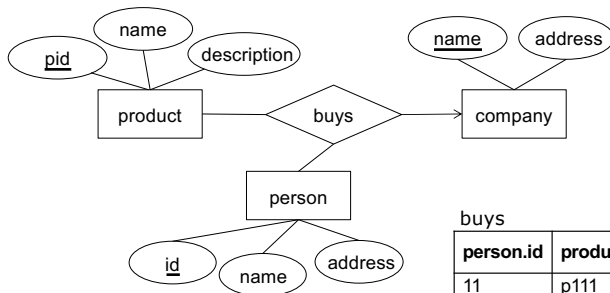
Let's try: Multi-Way Relationships

What if we want to ensure that each (person, product) pair comes from (or connects to) a single company?

Complete the diagram. (hint: don't forget the cardinality)

Let's try: Multi-Way Relationships

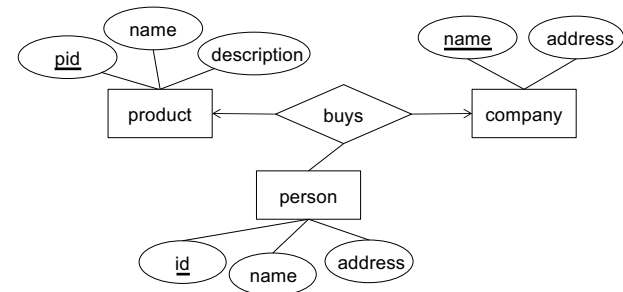Based on the E-R diagram, **identify if any row in the given table is not allowed**

buys

person.id	product.pid	company.name
11	p111	Humpty Inc.
11	p222	Humpty Inc.
22	p111	Humpty Inc.
22	p111	Dumpty Shop

Note: instances do not exist in E-R. These tables are only to help visualize the database being designed.
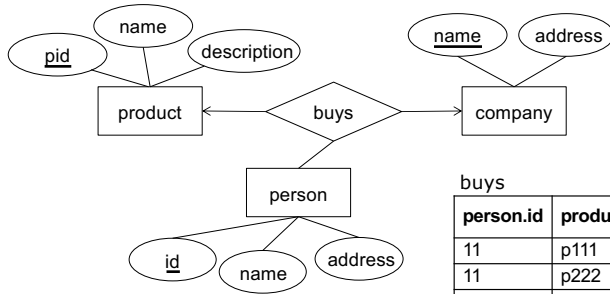
Let's try: Multi-Way Relationships

What can we interpret from the E-R diagram?

Let's try: Multi-Way Relationships

Based on the E-R diagram, **identify if any row in the given table is not allowed**
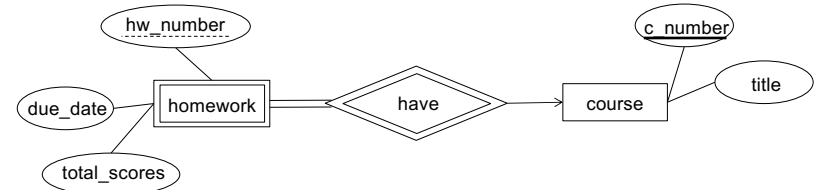

buys

person.id	product.pid	company.name
11	p111	Humpty Inc.
11	p222	Humpty Inc.
22	p111	Humpty Inc.
22	p111	Dumpty Shop
11	p333	Awesome Shop
33	p333	Awesome Shop

Note: instances do not exist in E-R. These tables are only to help visualize the database being designed.

Let's try (1): Weak Entity Set

What can be concluded from the following E-R diagram?

Let's try (2): Weak Entity Set

Draw an E-R diagram for the following scenario

Assume that the teaching evaluations of faculty members are conducted by the Dean's office, and the ratings are stored in the database.

A faculty can be identified by his/her `facId`. There is additional information maintained for a faculty – *(you come up with a few attributes to describe a faculty; e.g., name, ...)*.

For simplicity, assume a single rating is given for each evaluation so that an evaluation entity has attributes `date`, `rater`, and `rating`.

Since there might be several instances with identical values of all three attributes, an `Evaluation` entity must be associated with the correct `Faculty` instance to have meaning.