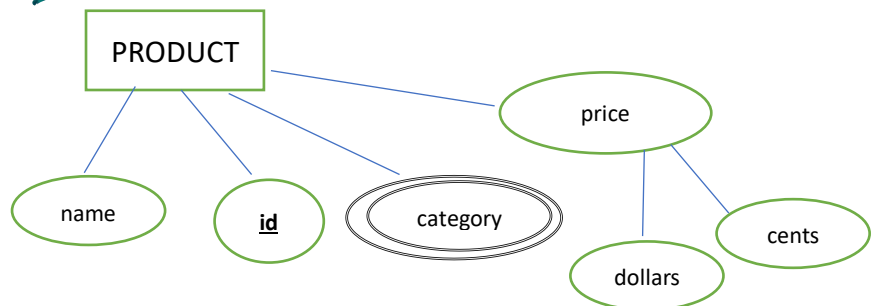# Worksheet 5 – CIS3530

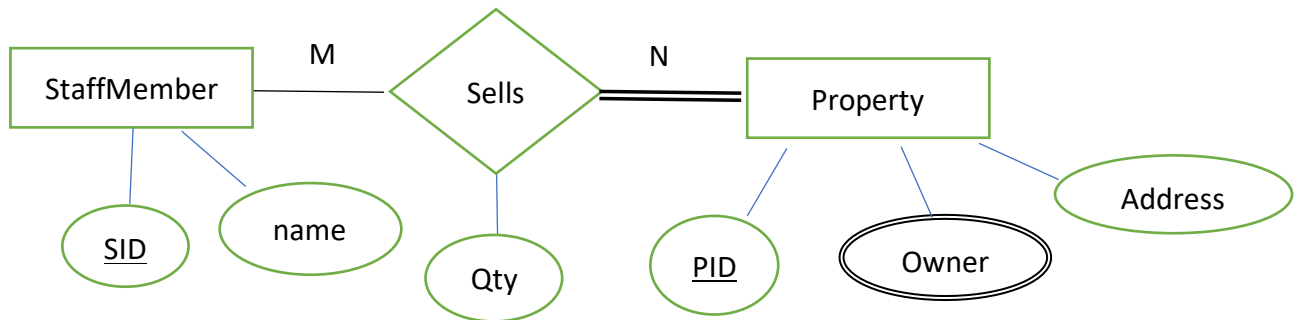- This is an optional and ungraded worksheet

Question 1. Identify the following in the given figure using arrows. 1a shows an example. There may be more than one in a category – you may identify just one. Write 'None' if none of that category exists in this figure.

a. Entity Type

b. Simple Attribute

c. Composite Attribute

d. Derived Attribute

e. Key Attribute

f. Entity Set

g. Multi-valued Attribute

h. Single-valued Attribute

)99	Doll	Toys	12 45
.12	Dining Chair	{Kitchen, Furniture}	239 00
55	Xbox	{Electronic, Multimedia System}	250 99

PRODUCT

name

id

category

price

dollars

cents

Question 2. Given the ER diagram below, state true or false for each of the statements given below:

i. A Staff member may or may not sell a property.
ii. Address is a composite attribute of Property – it consists of different sub-parts such as street, city, pincode.
iii. A staff member is allowed to sell only one property.
iv. A property can be sold by one or more staff members.
v. A property can be owned by one or more people.
vi. The following is a valid entity of Property for this model:
    PID: 119900
    Owner: Ritu
    Address: 50 Stone Road, Guelph, Ontario

Question 3: The cardinality ratio depends on the real-world meaning of the entity types involved and is defined by the specific application. For the binary relationships below, suggest cardinality ratios based on common-sense meaning of the entity types. Clearly state any assumptions you make.

	Entity 1	Cardinality Ratio	Entity 2
1.	Student		SocialSecurityCard
2.	Student		Teacher
3.	ClassRoom		Wall
4.	Country		CurrentPresident
5.	Course		TextBook
7.	Student		Class
8.	Class		Instructor
9.	Instructor		Office