Question 1

* 4 applications of the entity type rule
* 4 applications of 1-M relationship rule
* 1 applications of M-N relationship rule

CREATE TABLE Employee (…, PRIMARY KEY (EmpNo))

CREATE TABLE Customer (…, PRIMARY KEY (CustNo))

CREATE TABLE Order (…, PRIMARY KEY (OrdNo),

FOREIGN KEY (CustNo) REFERENCES Customer, CONSTRAINT Customer NOT NULL,

FOREIGN KEY (EmpNo) REFERENCES Employee)

CREATE TABLE Product (…, PRIMARY KEY (ProdNo))

Question 2

* 5 applications of the entity type rule
* 5 applications of 1-M relationship rule
* 2 applications of identifying relationship rule

CREATE TABLE Employee (…, PRIMARY KEY (EmpNo))

CREATE TABLE Customer (…, PRIMARY KEY (CustNo))

CREATE TABLE Order (…, PRIMARY KEY (OrdNo),

FOREIGN KEY (CustNo) REFERENCES Customer, CONSTRAINT Customer NOT NULL,

FOREIGN KEY (EmpNo) REFERENCES Employee)

CREATE TABLE Contains (…, PRIMARY KEY (OrdNo, ProdNo),

FOREIGN KEY (OrdNo) REFERENCES Order,

FOREIGN KEY (ProdNo) REFERENCES Product)

CREATE TABLE Product (…, PRIMARY KEY (ProdNo))

Question 3

* 2 applications of the entity type rule
* 1 applications of 1-M relationship rule
* 1 applications of identifying relationship rule

CREATE TABLE Building (…, PRIMARY KEY (BldgId))

CREATE TABLE Room (…, PRIMARY KEY (RoomNo),

FOREIGN KEY (BldgId) REFERENCES Building)