- 1. The notation 1:N shows the relationship's _____
- 2. What do we call a plan for a database design?
- 3. A database analyst working on the relationship between faculty members and students. One advisor may have no to many students but every student has exactly one advisor at any one time. The analyst also needs to keep track of the history of which advisor was assigned to a student at any given time, so she also has to keep track of advising-start and advising end. Which of the following proposals is the best approach under normalization theory? Note that FID stands for Faculty ID and SID stands for StudentID
- 4. Attributes of an entity may be _____
- 5. Maximum cardinality refers to _____
- 6. If a supertype can be related to one or more subtypes at a time (e.g., student supertype and club subtype in a college database), the subtype is called ____
- 7. If a supertype can be related to at most a single subtype at a time (e.g., patient supertype and male subtype or female subtype in a medical database), the subtype is called _____
- 8. Which of the following is a method of constructing data models?
- When we define a relationship between ORDER (OrderID, Orderdate, CustID...) and ORDERDETAIL (OrderID, Orderline, ProductID, QTY, Price...) we are using the _____ pattern
- 10. What do we call something that users want to keep track of?
- 11. Every weak entity must have a minimum cardinality of _____ on the entity on which it depends
- 12. A composite attribute is an attribute that _____
- Supertype/subtype entities are said to have a(n) _____ relationship
- 14. Which variant of the E-R model include has your instructor been emphasizing in CS240?
- 15. An E-R diagram with two entities, ORDER and CUSTOMER, looks like this: ORDER -O-----<>-----|- CUSTOMER. How many orders can an customer have in this relation?

- 16. An entity that holds specialized attributes that distinguish it from one or more other similar entities is a ____
- 17. An E-R diagram with two entities, ORDER and CUSTOMER, looks like this: ORDER -O----- <>----- |- CUSTOMER. How many customers can an order have in this relation?
- 18. A typical application of a recursive relationship in a data model is the relation of _____
- 19. Which of the following is/are (a) weak entity/entities?
- 20. For a relationship to be considered a binary relationship it must satisfy which of the following conditions?
- 21. When an entity has a relationship to itself, we have a(n) ____ relationship
- 22. The following crows-foot diagram shows how DRUG (DrugID) and SUPPLIER(SupplierID) are related to a QUOTE(DrugID, SupplierID, Quote) showing how much each drug costs from a specific supplier. (<- represents the three-legged symbol for "many".) What kind of pattern is this? DRUG (DrugID) -|-|--|-o-<-QUOTE (DrugID, SupplierID, Quote) ->-o--|-|- SUPPLIER (SupplierID)
- 23. The relationship of Company to Order is 1:N. Which entity is the parent?
- 24. In E-R diagrams and also in Crow's Foot notation, a vertical line (hash mark) across the relationship line right next to an entity indicates
- 25. The occurrence of a particular entity is called an entity _____
- 26. An attribute that determines which subtype should be used is a _____
- 27. What do we call characteristics of an entity?
- 28. The characteristics of a thing are described by its
- 29. Someone wants to keep track of any number of phone numbers associated with a specific client company in a database that has information about each client company stored in CLIENT. Which of the following approaches makes the best sense under normalization theory?

- 30. During the analytical phase of database design, when you see a paper form that has different blocks labeled _For Use Only By..._ you should immediately recognize that you should be using the ____ pattern
- 31. The relationship of Company to Order is 1:N. Which entity is the child?
- 32. Recursive relationships can have which of the following maximum cardinalities?
- 33. Discriminators can be _____
- 34. A strong entity can exist _____
- 35. An entity whose identifier includes the identifier of another entity is called _____
- 36. A customer can place from no to many orders but an order requires exactly one customer. What is the correct indication of cardinality for the customer-to-order relation?
- 37. If a student can have none to many different types of test scores (e.g., SAT, GMAT, LSAT) in the student record, what is the type of pattern between the STUDENT entity and the TEST attribute(s)?
- 38. An entity that cannot exist in the database without (and is logically dependent upon) another type of entity also existing in the database is called a _____ entity
- 39. An identifier may be _____
- 40. When modeling a system in which a given part may have none to several other parts, you will identify this situation as a(n) _____ relationship in your data model

- 41. In E-R diagrams and also in Crow's Foot notation, a circle across the relationship line right next to an entity indicates _____
- 42. An E-R diagram with two entities, ORDER and CUSTOMER, looks like this: ORDER -O-----<>-----|- CUSTOMER. What does the symbol next to the ORDER entity indicate?
- 43. Entities of a given type are grouped into an entity _____
- 44. In a medical database, we have a relationship between DRUG (DrugID, Recfreq, Recdose) and DRUGTREATMENT (PatientID, Drugfreq, Drugdose...). The relation between DRUG and DRUGTREATMENT is an example of the <u>pattern</u>
- 45. In an E-R model, the cardinality can be _____
- 46. If a student can have none to many different types (Testtype) of test scores (e.g., SAT, GMAT, LSAT) in the student record, how should one design the data model to be able to handle all the different score types?
- 47. The most important (or even only) reason for creating subtypes in a data model is to
- 48. An E-R diagram with two entities, ORDER and CUSTOMER, looks like this: ORDER -O-----<>-----|- CUSTOMER. What does the symbol next to the CUSTOMER entity indicate?
- 49. In a college database, we have a relationship between COURSE (Coursename...) and SECTION (Coursename, Semester, Instructor...). Such a relation is an example of the _____ pattern?

