2. What is an attribute?

A property of an entity

4. What is a repeating group?

Multiple entries in the same location on a table

6. What is a relational database?

A collection of tables consisting of relationships between entities, each entity has varying attributes.

8. How do you qualify the name of a field, and when do you need to do this?

Rename the field into something that shows more description by adding the entity name at the end of the field name, such as the STREET field in the CUSTOMER and REP tables of the TAL Industries example. This is done by changing the fields to STREET (REP) in the REP table and STREET (CUSTOMER) in the CUSTOMER table.

It is done if a field of data would be hard to distinguish between another without it.

10. What is a primary key? What is the primary key for each of the tables in the Colonial Adventure Tours database shown in chapter 1?

A unique identifier for a table

GUIDE\_NUM, TRIP\_ID, CUSTOMER\_NUM, RESERVATION\_ID, TRIP\_ID

12. Define first normal form.

A set of relational tables with no repeating groups.

14. Define third normal form. What types of problems might you encounter using tables that are not in third normal form?

When a table is in second normal form and its only determinants are candidate keys.

Updates requiring multiple row changes to change one row. Multiple iterations of the same data. Unable to add certain data without adding other data as well. Unintended deletions when deleting other data.