




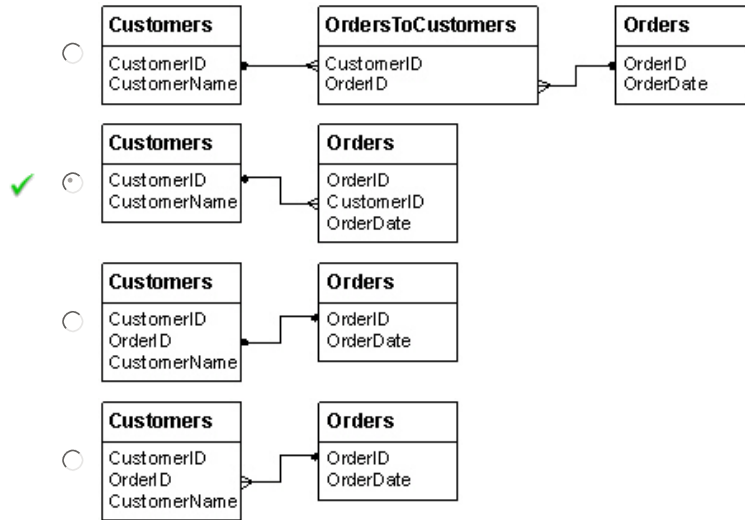


Instructions	Chapter 09 Study Guide
<p>► The results that are currently available for your attempt are listed to the right.</p> <p><b>Legend</b></p> <p>✓ Correct Response</p> <p>✗ Incorrect Response</p> <p>➡ Correct Answer</p>	<div> <a href="#">Quizzes Home</a>  <a href="#">Summary</a>  <a href="#">Submissions</a>  <a href="#">Reports</a></div> <hr/> <p>KEITH GABLE (username: keithwg)</p> <p> <a href="#">To Submissions</a></p> <hr/> <p><b>Attempt 1</b></p> <hr/> <p>Written: Dec 4, 2007 from 11:02 PM to 11:07 PM</p> <hr/> <p><b>Submission View</b></p> <hr/> <p>Your quiz has been submitted successfully.</p> <p><b>Question 1</b> <span>5.56 / 5.56 points</span></p> <p>To model a database on a real-world system, you typically represent each real-world entity as a/an _____.</p> <p>Answer: table ✓</p> <p><b>Question 2</b> <span>5.56 / 5.56 points</span></p> <p>The most common type of relationship between two tables is called a/an _____ relationship.</p> <p>Answer: one-to-many ✓</p> <p><b>Question 3</b> <span>5.56 / 5.56 points</span></p> <p>If two tables have a many-to-many relationship, you need to define a/an _____ table that relates their records.</p> <p>Answer: linking ✓</p> <p><b>Question 4</b> <span>5.56 / 5.56 points</span></p> <p>To maintain _____, if you delete a row in a primary key table, you must also delete any related rows in foreign key tables.</p> <p>Answer: referential integrity ✓</p> <p><b>Question 5</b> <span>5.56 / 5.56 points</span></p> <p>The rows in a table are kept in the sequence that's based on its _____ index.</p> <p>Answer: clustered ✓</p> <p><b>Question 6</b> <span>5.56 / 5.56 points</span></p> <p>To normalize a data structure, you apply the _____ in sequence.</p> <p>Answer: normal forms ✓</p> <p><b>Question 7</b> <span>5.56 / 5.56 points</span></p> <p>Typically, most database designers consider a database structure normalized if it's in the _____ normal form.</p> <p>Answer: third ✓</p> <p><b>Question 8</b> <span>5.56 / 5.56 points</span></p> <p>When you identify the data elements in a new database, you typically subdivide data elements into</p> <ul style="list-style-type: none"><li><input type="radio"/> the largest practical components</li><li>✓ <input checked="" type="radio"/> the smallest practical components</li><li><input type="radio"/> components that can be easily parsed each time you use them</li></ul> <p><b>Question 9</b> <span>5.56 / 5.56 points</span></p>

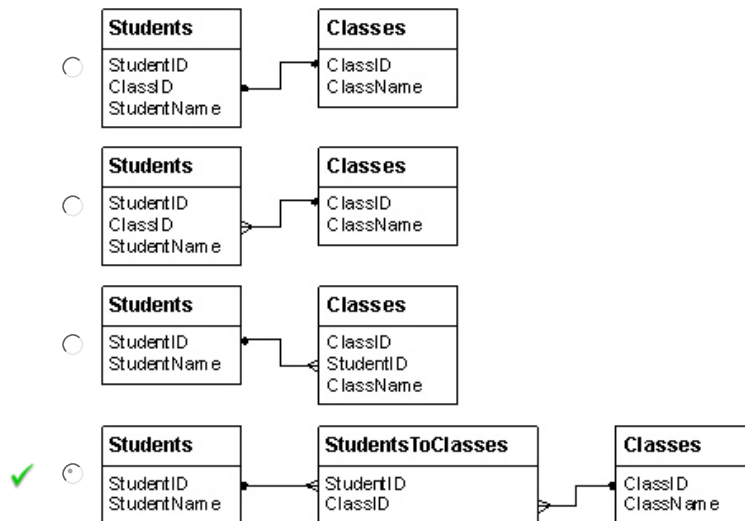
Which of the following diagrams best represents the relationship between a table of customers and a table of orders placed by customers?



**Question 10**

5.56 / 5.56 points

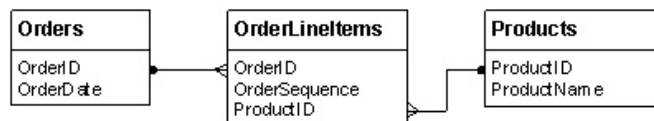
Which of the following diagrams best represents the relationship between a table of students and a table of classes for which the student is registered?



**Question 11**

5.55 / 5.55 points

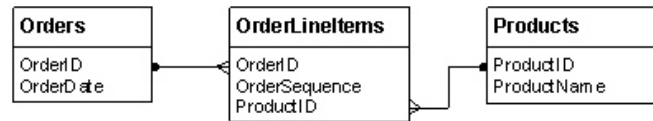
**Figure 9-1**



(Refer to figure 9-1.) Which column or columns in each table should be defined as the primary key?

- Option 1 (Correct): Orders: OrderID; OrderLineItems: OrderID and OrderSequence; Products: ProductID
- Option 2: Orders: OrderID and OrderDate; OrderLineItems: OrderID and OrderSequence; Products: ProductID
- Option 3: Orders: OrderID; OrderLineItems: OrderID; Products: ProductID

- Orders: OrderID; OrderLineItems: OrderID, OrderSequence, and ProductID; Products: ProductID and ProductName

**Question 12****5.55 / 5.55 points****Figure 9-1**

(Refer to figure 9-1.) Which column or columns in each table are foreign keys?

- Orders: OrderID; OrderLineItems: OrderSequence; Products: ProductID
- ✓ ○ Orders: none; OrderLineItems: OrderID and ProductID; Products: none
- Orders: OrderID; OrderLineItems: OrderID and OrderSequence; Products: ProductID
- Orders: none; OrderLineItems: OrderID and OrderSequence; Products: none

**Question 13****5.55 / 5.55 points**

Which of the following does *not* violate the referential integrity of a database?

- ✓ ○ deleting a row in a foreign key table without deleting the related row in the related primary key table
- inserting a new row into a table with a foreign key that doesn't match a primary key in the related table
- updating a foreign key with a value that doesn't match a primary key in the related table
- updating a primary key in a primary key table without also updating the foreign keys for the related rows in all related tables

**Question 14****0 / 5.55 points**

To enforce referential integrity, the database can

- A. return an error instead of doing the requested action
- B. do the requested action and do the related changes to the related tables
- C. do the requested action and mark any orphans in related tables
- ➡ ○ D. a or b
- ✗ ○ E. a or c

**Question 15****5.55 / 5.55 points**

Which of the following is not a good guideline for deciding when to create an index for a column?

- The column contains a large number of unique values.
- The column is a foreign key.
- ✓ ○ The column is frequently updated.
- The column is frequently used in search conditions or joins.

**Question 16****5.55 / 5.55 points**

To be in the first normal form, each cell in a table must contain

- a unique value
- a non-unique value
- ✓ ○ a single, scalar value

- ☐ a non-redundant value

**Question 17****5.55 / 5.55 points**

To apply the second normal form, you move columns that don't depend on the entire primary key to another table and establish a relationship between the two tables. This

- ☐ increases redundancy but makes maintenance easier
- ☐ increases redundancy but makes the data more consistent
- ☐ reduces redundancy but makes maintenance more difficult
- ✓ ☒ reduces redundancy and makes maintenance easier

**Question 18****5.55 / 5.55 points**

To be in the third normal form,

- ☐ the non-key columns must not contain repeating values
- ☐ each non-key column must depend only on the primary key
- ☐ each non-key column must depend on the entire primary key
- ✓ ☒ all of the above

**Attempt Score:** 94.45 / 100 (94.45%)**Overall Grade** (highest attempt): 94.45 / 100 (94.45%)