

1. ...	Line 4	12. A complete query nested inside another query is called a(n) ____	subquery
2. The <> operator is referred to as a(n) ____ operator.	single-row	13. The following SQL statement contains what type of subqueries?	single-row
3. The = operator is referred to as a(n) ____ operator.	single-row	<pre>SELECT isbn, title FROM books WHERE pubid = (SELECT pubid FROM books WHERE title = 'SHORTEST POEMS') AND retail-cost > (SELECT AVG(retail-cost) FROM books);</pre>	
4. The > operator is referred to as a(n) ____ operator.	single-row	14. The following SQL statement contains which type of subquery?	multiple-row
5. A(n) ____ subquery is one that can return several rows of results.	multiple-row	<pre>SELECT title, retail, category FROM books WHERE retail IN (SELECT MAX(retail) FROM books GROUP BY category);</pre>	
6. Any type of subquery can be used in the ____ clause of a SELECT statement.	all of the above	15. The following SQL statement contains which type of subquery?	single-row
7. Based on the contents of the BOOKS table, which line of the following SQL statement contains an error?	none of the above	<pre>SELECT title, retail, (SELECT AVG(retail) FROM books) FROM books;</pre>	
8. Based on the contents of the BOOKS table, which of the following SQL statements will display the title of all books published by the publisher of SHORTEST POEMS?	none of the above	16. If it is possible for a subquery to return a NULL value to the outer query for comparison, the ____ function should be used to substitute an actual value for the NULL.	NVL
9. Based on the contents of the CUSTOMERS table, which of the following SQL statements will display the customer# of all customers who were referred by the same individual that referred customer# 1003?	<pre>SELECT customer# FROM customers WHERE NVL(referred, 0) = (SELECT NVL(referred,0) FROM customers WHERE customer# = 1003);</pre>	17. An outer query is also referred to as a(n) ____ query.	parent query
10. Based on the contents of the CUSTOMERS table, which SQL statement will display the customers residing in the same state as customer#1013?	<pre>SELECT customer# FROM customers WHERE state = (SELECT state FROM customers WHERE customer#=1013);</pre>	18. The results of a subquery are passed back as input to the ____ query.	outer
11. Based upon the contents of the CUSTOMERS table, which of the following would be the most appropriate use of a subquery?	When searching for all customers who live in the same state as customer# 1007.	19. (SELECT category, AVG(retail) cataverage FROM books GROUP BY category);	multiple-column
	>	20. A subquery must include a(n) ____ clause.	both a and b
		21. A temporary table that is created when a multiple-column subquery is used in the FROM clause of an outer query is called a(n) ____.	inline view
		22. (T/F) A correlated subquery is a subquery that is executed once for each row in the outer query.	True
		23. (T/F) A correlated subquery references one or more columns in the outer query, and the EXISTS operator is used to test whether the relationship or link is present.	True
		24. (T/F) A group function can be used in a(n) inline view.	True
		25. (T/F) A group function cannot be included in the SELECT clause of a single-row subquery.	False
		26. (T/F) A multiple-column subquery cannot be nested in a WHERE clause.	False

27. (T/F) A multiple-row subquery can be nested in a HAVING clause.	True	46. (T/F) When used with a multiple-row subquery, the IN operator indicates that the records processed by the outer query must match one of the values returned by the subquery.	True
28. (T/F) A(n) correlated subquery references one or more columns from the outer query.	True	47. Which clause is used when the group results of a subquery need to be restricted, based on some condition?	HAVING
29. (T/F) A(n) outer query is also referred to as a parent query.	True	48. Which of the following can be used in a WHERE clause?	all of the above
30. (T/F) A(n) uncorrelated subquery is when the outer query is executed first, then the inner query is executed.	False	49. Which of the following terms refers to a type of subquery that is processed, or executed, once for each row in the outer query?	correlated subquery
31. (T/F) A subquery can only be nested in the WHERE or HAVING clause of the outer query.	False	50. Which operator will instruct Oracle12c to list all records with a value that is more than the highest value returned by the subquery?	>ALL
32. (T/F) A subquery is required when the condition for the inner query is based upon an unknown.	False		
33. (T/F) A subquery is required when the condition for the outer query is based upon an unknown.	True		
34. (T/F) A subquery nested in a SELECT clause cannot contain an ORDER BY clause.	True		
35. (T/F) A subquery nested in a WHERE clause can only be on the left side of the comparison operator.	False		
36. (T/F) If a subquery is nested in a HAVING clause, the subquery must be on the right side of the comparison operator.	True		
37. (T/F) In Oracle12c, a MERGE statement compares data between two tables and can perform a series of DML actions to assist in synchronizing the data of the two tables.	True		
38. (T/F) Multiple-row subqueries are nested queries that can return more than one row of results to the parent query.	True		
39. (T/F) Single-row operators can be used with multiple-row subqueries that return only one column of results.	False		
40. (T/F) The <ALL operator indicates that for a value to be included in the results, it must be less than the lowest value returned by the subquery.	True		
41. (T/F) The =ANY operator yields the same results as using the IN multiple-row operator.	True		
42. (T/F) The equal sign, =, is a valid single-row operator.	True		
43. (T/F) The greater than operator, >, is a valid operator for multiple-row subqueries.	False		
44. (T/F) Valid multiple-row operators include =, >, =, <=.	False		
45. (T/F) When the subquery is executed first and the value is passed back as input to the outer query, the subquery is known as an uncorrelated subquery.	True		

1. ...	Line 4		
2. The <> operator is referred to as a(n) ____ operator.	single-row		
3. The <ALL operator indicates that for a value to be included in the results, it must be less than the lowest value returned by the subquery.	True		
4. The =ANY operator yields the same results as using the IN multiple-row operator.	True		
5. The = operator is referred to as a(n) ____ operator.	single-row		
6. The > operator is referred to as a(n) ____ operator.	single-row		
7. A(n) correlated subquery references one or more columns from the outer query.	True		
8. A(n) outer query is also referred to as a parent query.	True		
9. A(n) ____ subquery is one that can return several rows of results.	multiple-row		
10. A(n) uncorrelated subquery is when the outer query is executed first, then the inner query is executed.	False		
11. Any type of subquery can be used in the ____ clause of a SELECT statement.	all of the above		
12. Based on the contents of the BOOKS table, which line of the following SQL statement contains an error?	none of the above		
13. Based on the contents of the BOOKS table, which of the following SQL statements will display the title of all books published by the publisher of SHORTEST POEMS?	none of the above		
14. Based on the contents of the CUSTOMERS table, which of the following SQL statements will display the customer# of all customers who were referred by the same individual that referred customer# 1003?	SELECT customer# FROM customers WHERE NVL(referred, 0) = (SELECT NVL(referred,0) FROM customers WHERE customer# = 1003);		
15. Based on the contents of the CUSTOMERS table, which SQL statement will display the customers residing in the same state as customer#1013?		SELECT customer# FROM customers WHERE state = (SELECT state FROM customers WHERE customer#=1013);	
16. Based upon the contents of the CUSTOMERS table, which of the following would be the most appropriate use of a subquery?		When searching for all customers who live in the same state as customer# 1007. >	
17. A complete query nested inside another query is called a(n) ____		subquery	
18. A correlated subquery is a subquery that is executed once for each row in the outer query.		True	
19. A correlated subquery references one or more columns in the outer query, and the EXISTS operator is used to test whether the relationship or link is present.		True	
20. The equal sign, =, is a valid single-row operator.		True	
21. The following SQL statement contains what type of subqueries?		single-row	
	SELECT isbn, title FROM books WHERE pubid = (SELECT pubid FROM books WHERE title = 'SHORTEST POEMS') AND retail-cost > (SELECT AVG(retail-cost) FROM books);		
22. The following SQL statement contains which type of subquery?		multiple-row	
	SELECT title, retail, category FROM books WHERE retail IN (SELECT MAX(retail) FROM books GROUP BY category);		
23. The following SQL statement contains which type of subquery?		single-row	
	SELECT title, retail, (SELECT AVG(retail) FROM books) FROM books;		
24. The greater than operator, >, is a valid operator for multiple-row subqueries.		False	
25. A group function can be used in a(n) inline view.		True	

26. A group function cannot be included in the SELECT clause of a single-row subquery.	False	45. When the subquery is executed first and the value is passed back as input to the outer query, the subquery is known as an uncorrelated subquery.	True
27. If a subquery is nested in a HAVING clause, the subquery must be on the right side of the comparison operator.	True	46. When used with a multiple-row subquery, the IN operator indicates that the records processed by the outer query must match one of the values returned by the subquery.	True
28. If it is possible for a subquery to return a NULL value to the outer query for comparison, the ____ function should be used to substitute an actual value for the NULL.	NVL	47. Which clause is used when the group results of a subquery need to be restricted, based on some condition?	HAVING
29. In Oracle12c, a MERGE statement compares data between two tables and can perform a series of DML actions to assist in synchronizing the data of the two tables.	True	48. Which of the following can be used in a WHERE clause?	all of the above
30. A multiple-column subquery cannot be nested in a WHERE clause.	False	49. Which of the following terms refers to a type of subquery that is processed, or executed, once for each row in the outer query?	correlated subquery
31. Multiple-row subqueries are nested queries that can return more than one row of results to the parent query.	True	50. Which operator will instruct Oracle12c to list all records with a value that is more than the highest value returned by the subquery?	>ALL
32. A multiple-row subquery can be nested in a HAVING clause.	True		
33. An outer query is also referred to as a(n) ____ query.	parent query		
34. The results of a subquery are passed back as input to the ____ query.	outer		
35. (SELECT category, AVG(retail) cataverage FROM books GROUP BY category);	multiple-column		
36. Single-row operators can be used with multiple-row subqueries that return only one column of results.	False		
37. A subquery can only be nested in the WHERE or HAVING clause of the outer query.	False		
38. A subquery is required when the condition for the inner query is based upon an unknown.	False		
39. A subquery is required when the condition for the outer query is based upon an unknown.	True		
40. A subquery must include a(n) ____ clause.	both a and b		
41. A subquery nested in a SELECT clause cannot contain an ORDER BY clause.	True		
42. A subquery nested in a WHERE clause can only be on the left side of the comparison operator.	False		
43. A temporary table that is created when a multiple-column subquery is used in the FROM clause of an outer query is called a(n) ____.	inline view		
44. Valid multiple-row operators include =, >, =, <=.	False		

1. <ANY	Which operator will instruct Oracle10g to list all records with a value that is less than the highest value returned by the subquery?	15. Line 3	Based on the contents of the BOOKS table, which line in the following SQL statement contains an error? 1 SELECT title 2 FROM books 3 WHERE pubid EXISTS IN 4 (SELECT pubid 5 FROM books 6 WHERE retail > 41.95);
2. >ALL	Which operator will instruct Oracle11g to list all records with a value that is more than the highest value returned by the subquery?	16. Line 4	Based upon the contents of the BOOKS table, which line of the following SQL statement contains an error? 1 SELECT title, pubid, cost, retail 2 FROM books 3 WHERE (pubid, cost) 4 (SELECT pubid, cost) 5 FROM books 6 WHERE pubid = 3);
3. ANY and ALL	Which operators can be combined with other comparison operators to treat the results of a subquery as a set of values, rather than as individual values?	17. MERGE statement	In Oracle11g, a ___ allows a series of DML actions to occur.
4. correlated	The following SQL statement contains which type of subquery? SELECT title FROM books WHERE EXISTS (SELECT isbn FROM orderitems WHERE books.isbn = orderitems.isbn);	18. more than the highest	The >ALL operator indicates that a value must be ___ value returned by the subquery.
5. correlated subquery	Which of the following terms refers to a type of subquery that is processed, or executed, once for each row in the outer query?	19. multiple-column	The following SQL statement contains which type of subquery? SELECT title, retail, category, cataverage FROM books NATURAL JOIN (SELECT category, AVG(retail) cataverage FROM books GROUP BY category);
6. DML	With a MERGE statement, a series of ___ actions can occur with a single SQL statement.	20. multiple-row	A ___ subquery is one that can return several rows of results.
7. EXISTS	The ___ operator is used to determine whether a condition is present in a subquery.	21. multiple-row	The following SQL statement contains which type of subquery? SELECT title, retail, category FROM books WHERE retail IN (SELECT MAX(retail) FROM books GROUP BY category);
8. HAVING	If the result returned from a subquery must be compared to a group function, then the inner query must be nested in the outer query's ___ clause.	22. multiple-row subquery	Which of the following subqueries returns more than one row of results to the outer query?
9. HAVING	Which clause is used when the group results of a subquery need to be restricted, based on some condition?	23. nested function	The outer query receives its input from the ___.
10. IN	When a multiple-column subquery is included in the WHERE or HAVING clause of the outer query, which operator is used by the outer query to evaluate the results of the subquery?		
11. IN	The ___ operator indicates that the records processed by the outer query must match one of the values returned by the subquery.		
12. inline view	The following SQL statement contains what type of subquery? SELECT b.title, b.retail, a.category, a.cataverage FROM books b, (SELECT category, AVG(retail) cataverage FROM books GROUP BY category) a WHERE b.category = a.category;		
13. inline view	A temporary table that is created when a multiple-column subquery is used in the FROM clause of an outer query is called an ___.		
14. IS NULL	Which comparison operator allows you to search for NULL values in a subquery?		

24. none of the above	Based on the contents of the BOOKS table, which line of the following SQL statement contains an error? 1 SELECT isbn, title 2 FROM books 3 WHERE pubid = 4 (SELECT pubid 5 FROM books 6 WHERE title = 'SHORTEST POEMS') 7 AND retail-cost > 8 (SELECT AVG(retail-cost) 9 FROM books);
25. NVL	If it is possible for a subquery to return a NULL value to the outer query for comparison, the ___ function should be used to substitute an actual value for the NULL.
26. ORDER BY	A subquery, except one in the FROM clause, cannot contain an ___ clause.
27. parentheses	What must be used to separate a subquery from the outer query?
28. parent query	An outer query is also referred to as a(n) ___ query.
29. SELECT and FROM	A subquery must include a ___ clause.
30. single-row	The operators =, <, >, <=, >=, and <> are referred to as ___ operators.
31. single-row	The following SQL statement contains what type of subqueries? SELECT isbn, title FROM books WHERE pubid = (SELECT pubid FROM books WHERE title = 'SHORTEST POEMS') AND retail-cost > (SELECT AVG(retail-cost) FROM books);
32. single-row	The following SQL statement contains which type of subquery? SELECT title, retail, (SELECT AVG(retail) FROM books) FROM books;
33. subquery	A complete query nested inside another query is called a ___.
34. uncorrelated	The following SQL statement contains which type of subquery? SELECT title, retail, category, cataverage FROM books NATURAL JOIN (SELECT category, AVG(retail) cataverage FROM books GROUP BY category);

1. The <> operator is referred to as a(n) ____ operator.	single-row	12. Based on the contents of the BOOKS table, which of the following SQL statements will display the title of all books published by the publisher of SHORTEST POEMS?	None of the above
2. The > operator is referred to as a(n) ____ operator.	Single-row	13. Based on the contents of the CUSTOMERS table, which SQL statement will display the customers residing in the same state as customer#1013?	SELECT customer# FROM customers WHERE state = (SELECT state FROM customers WHERE customer#=1013);
3. A(n) _____ is a nested query - one complete query inside another query.	subquery	14. Based upon the contents of the BOOKS table, which line of the following SQL statement contains an error? 1 SELECT title, pubid, cost, retail 2 FROM books 3 WHERE (pubid, cost) 4 (SELECT pubid, cost) 5 FROM books 6 WHERE pubid = 3);	Line 4
4. A(n) _____ query can return several rows of results, but only one column.	Multiple-Row	15. The EXISTED operator is used to determine whether a condition is present in a subquery.	False
5. A(n) _____ subquery can return only one row of results to the outer query.	single-row	16. The EXISTS operator must be listed ____.	none of the above
6. A(n) ____ subquery is one that can return several rows of results.	Multiple-Row	17. If a subquery is nested in a HAVING clause, the subquery must be on the right side of the comparison operator.	True
7. A(n) _____ subquery returns more than one column to the outer query.	multiple column	18. If it is possible for a subquery to return a NULL value to the outer query for comparison, the ____ function should be used to substitute an actual value for the NULL.	NVL
8. Any type of subquery can be used in the ____ clause of a SELECT statement.	All of the above	19. If the value of the EXISTS operator is _____, then the rows meeting the condition are displayed.	TRUE
9. Based on the contents of the BOOKS table, which line in the following SQL statement contains an error? 1 SELECT title 2 FROM books 3 WHERE pubid EXISTS IN 4 (SELECT pubid 5 FROM books 6 WHERE retail > 41.95);	Line 3	20. IN is a valid multiple-row subquery operator.	True
10. Based on the contents of the BOOKS table, which line of the following SQL statement contains an error? 1 SELECT isbn, title 2 FROM books 3 WHERE pubid = 4 (SELECT pubid 5 FROM books 6 WHERE title = 'SHORTEST POEMS') 7 AND retail-cost > 8 (SELECT AVG(retail-cost) 9 FROM books);	None of the above	21. IN is not a valid operator for a multiple-column subquery.	False
11. Based on the contents of the BOOKS table, which line of the following SQL statement contains an error? 1 SELECT isbn, title 2 FROM books 3 WHERE pubid = 4 (SELECT pubid 5 FROM books 6 WHERE title = 'SHORTEST POEMS') 7 AND retail-cost > 8 (SELECT AVG(retail-cost) 9 FROM books);	none of the above	22. The IN operator can be used with single-row, multiple-row, or multiple-column subqueries.	True
		23. The IN operator is valid for multiple-row subqueries.	True

24. A multiple-column subquery nested in the SELECT clause of the outer query is known as an inline view.	False
25. The NVL function can be used in a subquery.	True
26. The ____ operator indicates that the records processed by the outer query must match one of the values returned by the subquery.	IN
27. An outer query is also referred to as a(n) ____ query.	Parent query
28. The outer query receives its input from the ____.	Subquery
29. The results of a subquery are passed back to the _____ query.	outer
30. A single-row subquery can be nested in the SELECT clause of the outer function.	True
31. A subquery, except one in the FROM clause, cannot contain a(n) ____ clause.	ORDER BY
32. A subquery is a complete query nested inside another query.	True
33. A subquery is required when the condition for the outer query is based upon an unknown.	True
34. A subquery must include a(n) ____ clause.	both a and b
35. A subquery nested in a SELECT clause cannot contain an ORDER BY clause.	True
36. Valid multiple-row operators include ANY, ALL, and _____.	IN
37. When a multiple-column subquery is included in the outer query's WHERE clause, the column names listed in the WHERE clause must be in the same order as they're listed in the subquery's SELECT clause.	True
38. When used with a multiple-row subquery, the IN operator indicates that the records processed by the outer query must match one of the values returned by the subquery.	True
39. Which comparison operator allows you to search for NULL values in a subquery?	IS NULL
40. Which of the following must be used to separate a subquery from the outer query?	()
41. Which of the following operators is the equivalent of the IN comparison operator?	=ANY
42. Which of the following subqueries returns more than one row of results to the outer query?	multiple-row subquery

43. Which operators can be combined with other comparison operators to treat the results of a subquery as a set of values, rather than as individual values?	ALL and ANY
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