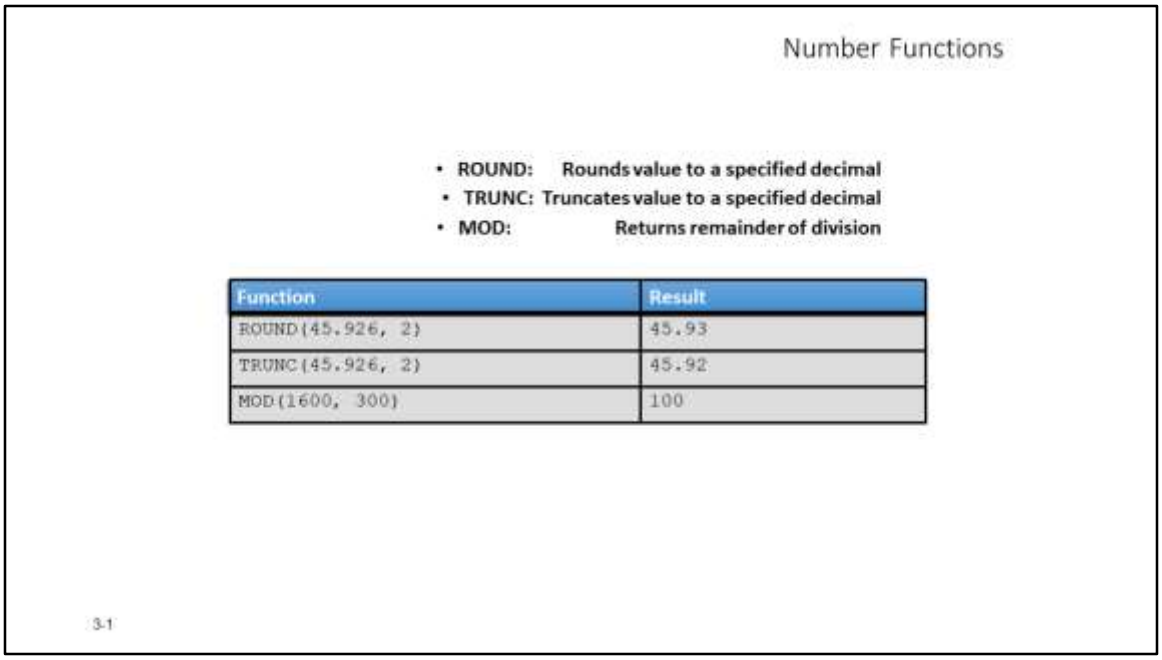
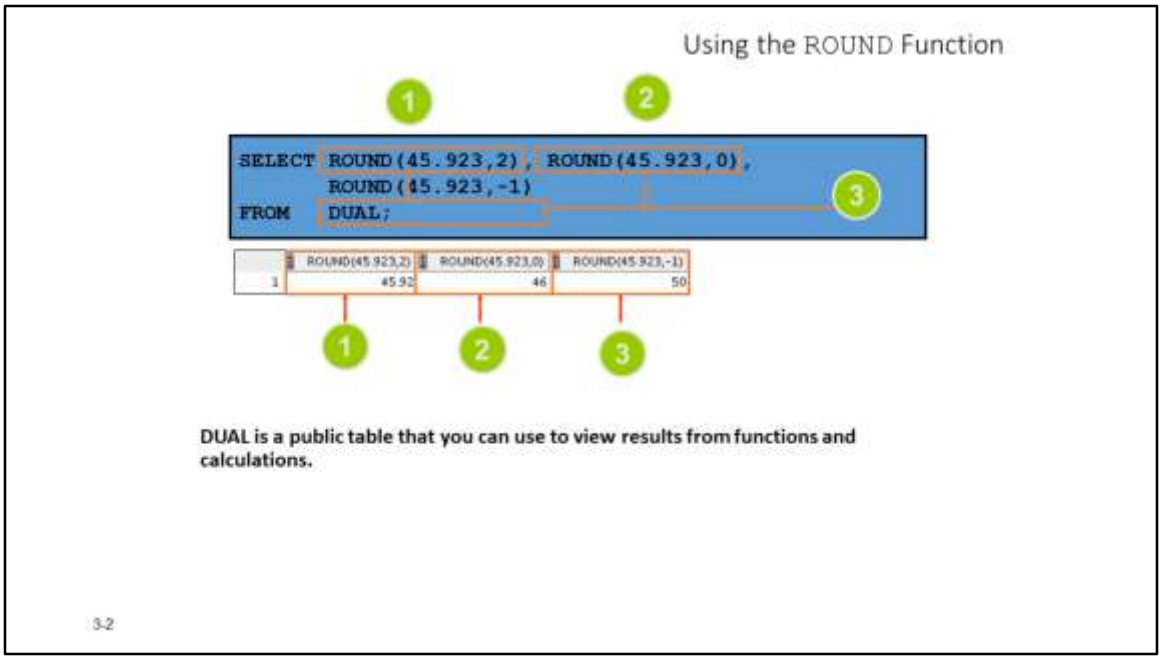


Number Functions

Number functions accept numeric input and return numeric values. This section describes some of the number functions.

Note: This list contains only some of the available number functions.
For more information, see the "Numeric Functions" section in *Oracle Database SQL Language Reference* for 10*g* or 11*g* database.

Function	Purpose
ROUND(*column*|*expression*, *n*)	Rounds the column, expression, or value to *n* decimal places or, if *n* is omitted, no decimal places (If *n* is negative, numbers to the left of decimal point are rounded.)
TRUNC(*column*|*expression*, *n*)	Truncates the column, expression, or value to *n* decimal places or, if *n* is omitted, *n* defaults to zero
MOD(*m*,*n*)	Returns the remainder of *m* divided by *n*



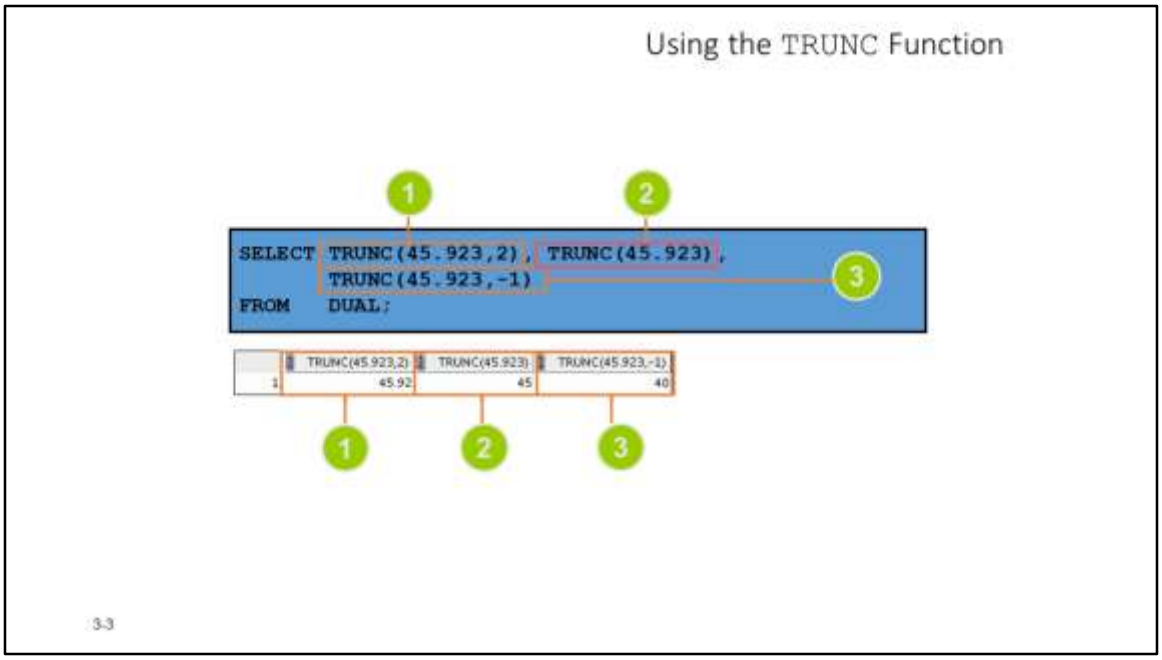
Using the ROUND Function

The ROUND function rounds the column, expression, or value to *n* decimal places. If the second argument is 0 or is missing, the value is rounded to zero decimal places. If the second argument is 2, the value is rounded to two decimal places. Conversely, if the second argument is –2, the value is rounded to two decimal places to the left (rounded to the nearest unit of 100).

The ROUND function can also be used with date functions. You will see examples later in this lesson.

DUAL Table

The DUAL table is owned by the user SYS and can be accessed by all users. It contains one column, DUMMY, and one row with the value X. The DUAL table is useful when you want to return a value only once (for example, the value of a constant, pseudocolumn, or expression that is not derived from a table with user data). The DUAL table is generally used for completeness of the SELECT clause syntax, because both SELECT and FROM clauses are mandatory, and several calculations do not need to select from the actual tables.

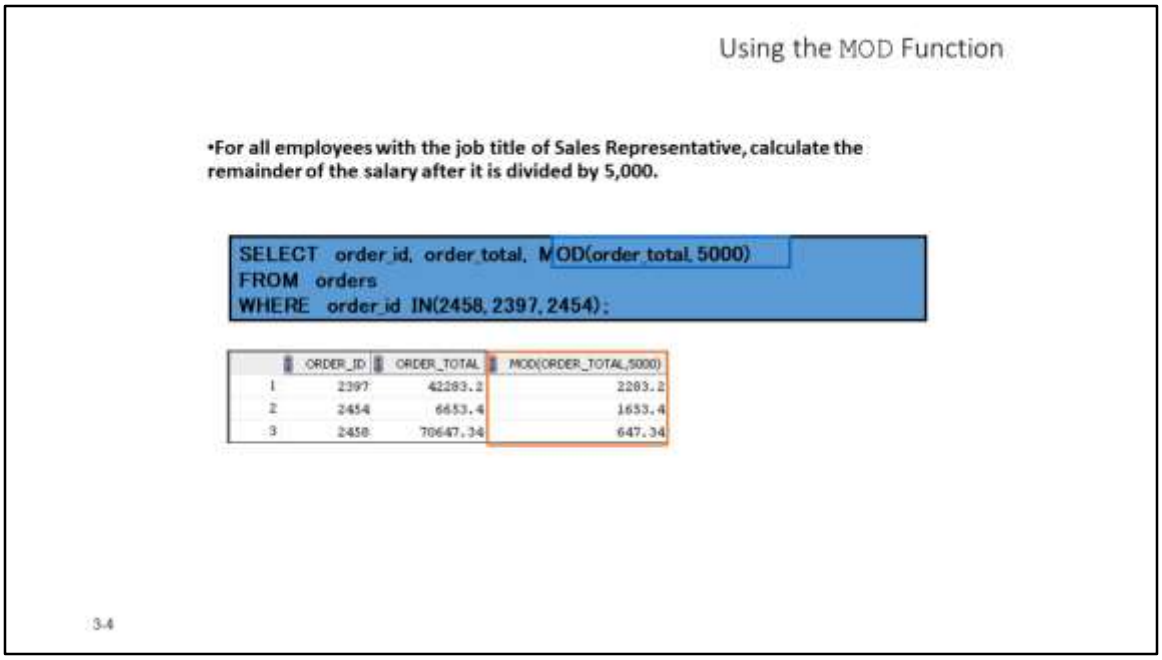


Using the TRUNC Function

The TRUNC function truncates the column, expression, or value to *n* decimal places.

The TRUNC function works with arguments similar to those of the ROUND function. If the second argument is 0 or is missing, the value is truncated to zero decimal places. If the second argument is 2, the value is truncated to two decimal places. Conversely, if the second argument is –2, the value is truncated to two decimal places to the left. If the second argument is –1, the value is truncated to one decimal place to the left.

Like the ROUND function, the TRUNC function can be used with date functions.



Using the MOD Function

The MOD function finds the remainder of the first argument divided by the second argument. The slide example calculates the remainder of the order_total after dividing it by 5,000 for all the orders whose order_ID is 2458, 2397 or 2454.

Note: The MOD function is often used to determine whether a value is odd or even. The MOD function is also the Oracle hash function.