

Access: DSum Function

In Access, the **DSum** function returns the sum of a set of numeric values in a specified set of records (or domain).

The syntax for the **DSum** function is:

DSum (expression, domain, [criteria])

expression is the numeric values that you wish to sum.

domain is the set of records. This can be a table or a query name.

criteria is optional. It is the WHERE clause to apply to the *domain*.

For example:

Let's take a look at a simple example:

DSum("UnitPrice", "Order Details", "OrderID = 10248")

In this example, you would be summing the UnitPrice field in the Order Details table where the OrderID is 10248. This is the same as the following SQL statement:

```
SELECT Sum([Order Details].UnitPrice) AS SumOfUnitPrice
FROM [Order Details]
WHERE ((([Order Details].OrderID)=10248));
```

You can also sum more than one numeric field. For example:

DSum("UnitPrice * Quantity", "Order Details", "OrderID = 10248")

This example would sum the UnitPrice x Quantity for all records in the Order Details table where the OrderID is 10248. This is the same as the following SQL statement:

```
SELECT Sum([UnitPrice]*[Quantity]) AS Expr1
FROM [Order Details]
WHERE ((([Order Details].OrderID)=10248));
```

VBA Code

The **DSum** function can be used in VBA code. For example:

```
Dim LTotal As Currency
```

LTototal = DSum("UnitPrice", "Order Details", "OrderID = 10248")

In this example, the variable called LTototal would now contain the summed UnitPrice from the Order Details table where the OrderID is 10248.

SQL/Queries

You can also use the **DSum** function in a query.

The screenshot shows the 'Query1: Select Query' window in Microsoft Access. On the left, the 'Orders' table is listed with fields: *, OrderID, CustomerID, EmployeeID, and OrderDate. The 'OrderID' field is selected. Below the table list, the 'Field' list contains 'OrderID' and 'Expr1: DSum("UnitPrice", "Order Details", "OrderID = 10248")'. The 'Table' list shows 'Orders' for 'OrderID' and is empty for 'Expr1'. The 'Sort' list is empty for both. The 'Show' list has checkboxes checked for both 'OrderID' and 'Expr1'. The 'Criteria' and 'or' lists are empty.

Field:	OrderID	Expr1: DSum("UnitPrice", "Order Details", "OrderID = 10248")
Table:	Orders	
Sort:		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		
or:		