

# Database Functions

## **DAVE(database,offset,crit)**

### **or DAVERAGE(database,offset,crit)**

Takes the average of numeric records that match criteria.

This is a sample database:

	A	B	C	D
1	NAME		GRADE	GPA GRADE
2	Joe	B	3.2	B
3	Sue	A	4.7	
4	Robert		C	2.7
5	Steve		A	4.5
6	Ann	B	4.2	

The database range is A1:C6. The criteria range is D1:D2.

To calculate the average GPA of everyone who earned a B use this formula:

$$\text{DAVE}(A1:C6,2,D1:D2) = 3.7$$

## **DCOUNT(database,offset,crit)**

Counts all the numeric items matching criteria in the column offset from the upper left corner of the database range.

This is a sample database:

	A	B	C	D
1	NAME		GRADE	GPA GRADE
2	Joe	B	3.2	B
3	Sue	A	4.7	
4	Robert		C	2.7
5	Steve		A	4.5
6	Ann	B	4.2	

The database range is A1:C6. The criteria range is D1:D2.

To count the number of students who earned B's use this formula:

$$\text{DCOUNT}(A1:C6,1,D1:D2) = 2$$

## **DMAX(database,offset,crit)**

Returns the maximum numeric value of the records in database that match criteria.

This is a sample database:

	A	B	C	D
1	NAME		SALES	REGION REGION
2	Joe	3000	East	East
3	Sue	4500	North	
4	Robert	2800		East

5 Steve 3700 South  
 6 Ann 2400West

The database range is A1:C6. The criteria range is D1:D2.

To find the largest sales figure in the Eastern region use this formula:

$$\text{DMAX}(A1:C6,1,D1:D2) = 3000$$

**DMIN(database,offset,crit)**

Returns the smallest numeric item in the records that match the criteria.

This is a sample database:

	A	B	C	D
1	NAME	SALES	REGION	REGION
2	Joe	3000	East	East
3	Sue	4500	North	
4	Robert	2800	East	
5	Steve	3700	South	
6	Ann	2400	West	

The database range is A1:C6. The criteria range is D1:D2.

To find the smallest sales figure in the Eastern region use this formula:

$$\text{DMIN}(A1:C6,1,D1:D2) = 2800$$

**DSTDDEV(database,offset,crit)**

**or DSTDEV(database,offset,crit)**

Returns the standard deviation of the numeric records that match the criteria.

This is a sample database:

	A	B	C	D
1	STATE	REGION	AVG RF	REGION
2	AL	South	3.7	West
3	CA	West	2.1	
4	NJ	East	5.2	
5	FL	South	4.9	
6	LA	South	6.8	
7	TX	West	5.0	
8	MA	North	7.6	
9	AZ	West	2.2	
10	NV	West	2.4	

The database range is A1:C10. The criteria range is D1:D2.

To find the standard deviation of rainfall in the Western region use this formula:

$DSTDEV(A1:C10,2,D1:D2) = 1.2029$

**DSUM(database,offset,crit)**

Sums all the items matching criteria in the column offset from the upper left corner of the database range.

This is a sample database:

	A	B	C	D	
1	STATE	REGION	AVG RF	REGION	
2	AL	South	3.7	West	
3	CA	West	2.1		
4	NJ	East	5.2		
5	FL	South	4.9		
6	LA	South	6.8		
7	TX	West	5.0		
8	MA	North	7.6		
9	AZ	West	2.2		
10	NV	West	2.4		

The database range is A1:C10. The criteria range is D1:D2.

To find the total amount of rainfall for the Southern region use this formula:

$DSUM(A1:C10,2,D1:D2) = 15.4$

**DVAR(database,offset,crit)**

Returns the variance of the numeric records that match the criteria.

This is a sample database:

	A	B	C	D	
1	STATE	REGION	AVG RF	REGION	
2	AL	South	3.7	South	
3	CA	West	2.1	West	
4	NJ	East	5.2		
5	FL	South	4.9		
6	LA	South	6.8		
7	TX	West	5.0		
8	MA	North	7.6		
9	AZ	West	2.2		
10	NV	West	2.4		

The database range is A1:C10. The criteria range is D1:D2.

To find the variance of rainfall in the Southern and Western regions use this formula:

$DVAR(A1:C10,2,D1:D3) = 2.7192$