Calculating the *Mean* (SAMPLE)
Average Rubythroat First Arrival Dates

Step 1) Organize the data

List the dates of first sightings. (You don't have to include the years.) Find the earliest first sighting. Then write "1st" down in the "order" column next to that date. Then find the 2nd earliest sighting. Write "2nd" next to that date. Continue to do this. If hummers were seen on the same date in two different years, give them the same order number.

First Spring Hummer in St. Louis, MO Observations by Lanny Chambers 1994-2003	
Date of 1st Sighting	**Order (1st, 2nd, etc)**
04/22	**5th**
04/20	**4th**
04/20	**4th**
04/19	**3rd**
4/16	**1st**
4/19	**3rd**
4/16	**1st**
4/19	**3rd**
4/17	**2nd**
4/23	**6th**

Step 2) Determine the range (the difference between the earliest and latest dates in a set of data).

- The earliest date is **April 16**.
- The latest date is **April 23**.
- The range is **7** days.

Step 3) Enter data on this second chart

Journey North Hummingbirds

- Write in calendar dates, beginning with the earliest sighting (on line 1) and ending with the latest one.
- Enter all first sighting dates in the next column. When you have more than one date that's the same, it goes on the same line.
- In the last column, write in the values (order numbers) for each date entered.
- Add the **values** for all the dates on your chart to get the total.

Value	Calendar Date	Date of First Sighting in St. Louis	Values for each date
1	04/16	4/16/98, 4/16/00	1, 1
2	04/17	4/17/02	2
3	04/18		
4	04/19	04/19/97, 4/19/99, 4/19/01	4, 4, 4
5	04/20	04/20/95, 04/20/96	5, 5
6	04/21		
7	04/22	4/22/94	7
8	04/23	4/23/03	8
		Total	41

Step 4) Calculate the Mean (the average of all the values).
To determine the mean, take the sum (total) the values and divide by the number of years. The answer will give you the order number of the mean date.

41 divided by 10 years = 4.1 , so mean arrival date = 4/19

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