Averages

Mean (Arithmetic Average)	Example 1	Example 2
Mean = $\frac{sum}{n}$, To get sum, add up the values for all objects n = the number of objects	Find the average of 88, 90, 76 $\frac{80+90+76}{3} = \frac{246}{3}$ = 82	One day a supermarket received a delivery of 25 frozen turkeys. If the average (arithmetic mean) weight of a turkey was 14.2 pounds, what was the total weight, in pounds, of all the turkeys? $\frac{Total\ weight}{\#\ of\ turkeys} = avg.weight$ $\frac{x}{25} = 14.2$ X = 25 × 14.2 = 355
Median	**Example 3 (Odd number of numbers)**	**Example 4 (Even number of numbers)**
Rank numbers from lowest to highest and find the middle number. n = the number of numbers The rank of the middle number is (odd) $\frac{n+1}{2}$	7,23,5,31,22→ 5,7,22,23,31 n = 5 Rank of middle number is $\frac{5+1}{2} = 3$ (the third number) The number is 22, which is the median.	7,23,5,31,22,17 → 5,7,17,22,23,31 n = 6 Rank of middle number is $\frac{6+1}{2} = 3.5$ (between third and fourth numbers) Therefore take average of the third and fourth numbers $\frac{17+22}{2}$ = median = 19.5
Mode	**Example 5**	**Example 6**
The mode is the number in the set that occurs most often	9,9,3,5,7,5,9,2 9 appears the most in the set mode = 9	14,3,22,5,7,7,3,1 3 & 7 appear the most modes = 3,7