

Median

To find the median, first **SORT THE DATA** (list the numbers in order from lowest to highest). The median is the value of the **middle** number in the ordered list. If there is no middle number, then use the mean of the middle **pair** of numbers.

median → the middle number.

Example 3

Find the median temperature for 8°C, 14°C, 6°C, 10°C, and 0°C.

① Order the set of temperatures from lowest to highest.

0, 6, 8, 10, 14

② Find the middle number 8

③ the median is 8°C

Example 4

Determine the median for this set of hourly wages: \$14.50, \$17.00, \$13.25, \$19.00, \$14.25, \$18.50

① Order the set of hourly wages from lowest to highest.

13.25, 14.25, 14.50, 17.00, 18.50, 19.00

② there are two middle numbers 14.50 and 17.00

③ Find the mean of the 2 middle numbers 14.50 and 17.00

$$\bar{x} = \text{mean} = \frac{14.50 + 17.00}{2} = \frac{31.50}{2} = \underline{\underline{\$15.75}} \text{ (median)}$$

Example 5

Find the median age for the group of students shown in the chart.

NOTE: The frequency refers to how many students are at a specific age.

→ there 3 students who are 25 years
 " 3 " " " 26 years
 " 7 " " " 27 years

Age of Student	Frequency
25	3 students
26	3 students
27	7 students

How many students in each age group.

① order the ages of all students from lowest to highest.

25, 25, 25, 26, 26, 26, 27, 27, 27, 27, 27, 27, 27
 6 numbers 6 numbers

Since there are 13 students, the age of the middle one is 27 years

② Median age is 27 years