



2. Find the number of workers with wages less than or equal to
 - (a) \$105,
 - (b) \$110,
 - (c) \$115.

3. Can you find the exact number of workers with wages \leq \$118?

In Class Activity 1, the answers in questions 2(b) and 2(c) are obtained by finding the sum of two or more frequencies. This gives rise to the idea of **cumulative frequency**. The **cumulative frequency** of a value is the number of observations that is less than or equal to that value. We can set up a **cumulative frequency table** for the upper endpoint of each class interval from a frequency table as shown below.

The frequency table in Class Activity 1 is as follows:

Daily wages (\$x)	Frequency
$100 < x \leq 105$	4
$105 < x \leq 110$	10
$110 < x \leq 115$	22
$115 < x \leq 120$	9
$120 < x \leq 125$	5

Its corresponding cumulative frequency table is as follows:

Daily wages (\$x)	Cumulative Frequency
≤ 100	0
≤ 105	4
≤ 110	14
≤ 115	36
≤ 120	45
≤ 125	50

$$10 + 4 = 14$$

$$14 + 22 = 36$$

$$36 + 9 = 45$$

$$45 + 5 = 50$$

The last cumulative frequency should be equal to the total frequency.

Remark