Algebra 1B Date:

7.5 Frequency Tables and Histograms

1. A teacher marked a set of 32 test papers, the grades or scores earned by the students are listed below. Organize the data in the table below and construct a frequency histogram.

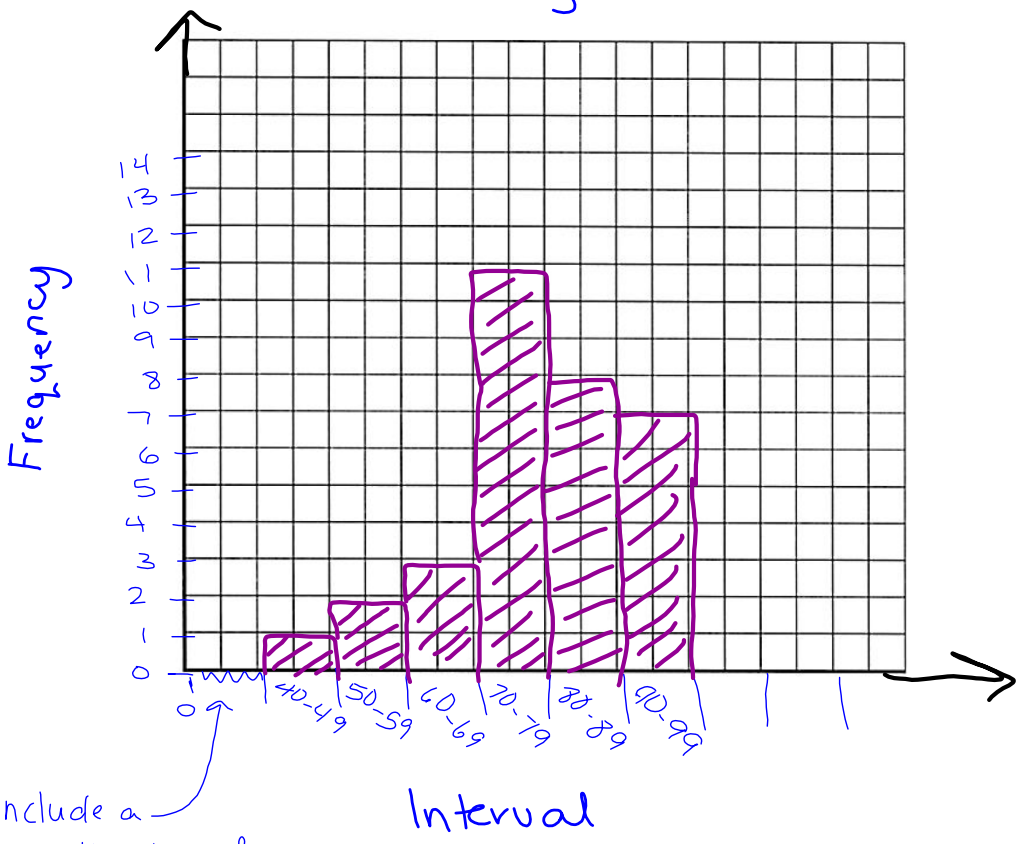
**GRADES**

90, 85, 74, 86,
65, 62, 99, 95,
77, 82, 50, 83,
77, 93, 73, 72,
98, 66, 45, 99,
50, 89, 78, 70,
75, 95, 80, 78,
83, 81, 72, 75

| Interval | Tally | Frequency |
|---|---|---|
| 40 – 49 | 1 | 1 |
| 50 – 59 | 11 | 2 |
| 60 – 69 | 111 | 3 |
| 70 – 79 | 𝍸 𝍸 1 | 11 |
| 80 – 89 | 𝍸 111 | 8 |
| 90 – 99 | 𝍸 11 | 7 |

32 Total

Histogram




Include a break interval b/c we do not start at 0!

2. The table below shows the distribution of scores that 20 students received on a classroom test.

a) Complete the cumulative frequency table below, using the data given in the frequency table.

| Interval | Frequency |
|---|---|
| 65-69 | 3 |
| 60-64 | 4 |
| 55-59 | 7 |
| 50-54 | 4 |
| 45-49 | 2 |

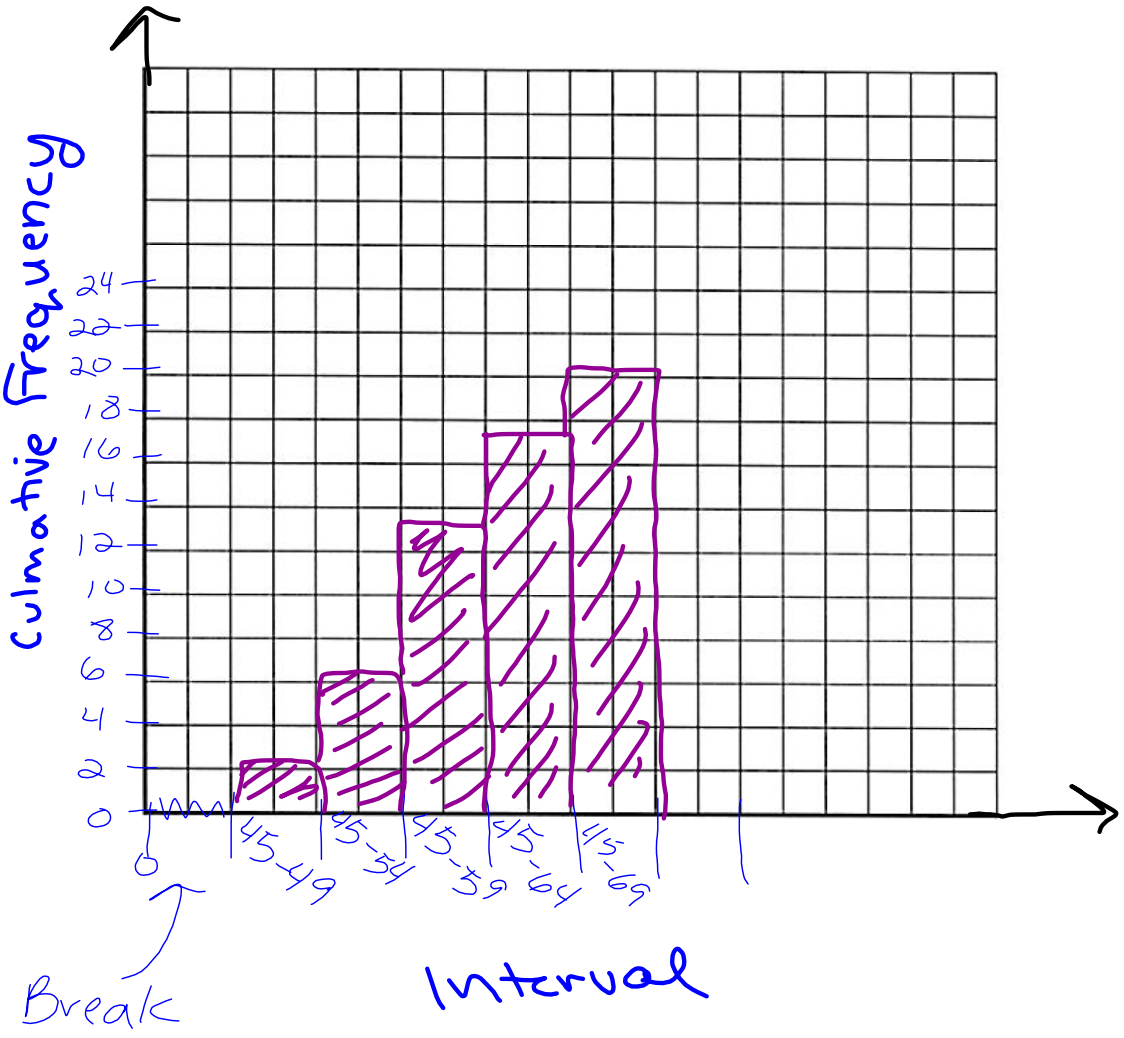
should end w/ number of data

| Interval | Cumulative Frequency |
|---|---|
| 45-69 | 20 |
| 45-64 | 17 |
| 45-59 | 13 |
| 45-54 | 6 |
| 45-49 | 2 |

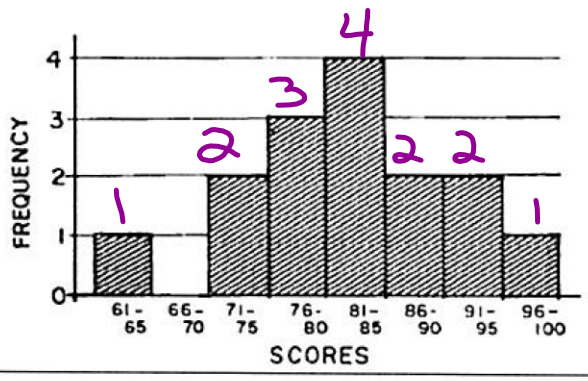
adding on an interval

b) Construct a cumulative frequency histogram using the table completed in part *a*.

Histogram



3. The graph below shows the distribution of scores on a math test. How many students took the math test?




1+2+3+4+2+2+1

15 students

4. The cumulative frequency table below shows the distribution of scores on a math test. How many scores were greater than 90?

| Interval | Cumulative Frequency |
|---|---|
| 61-70 | 4 |
| 61-80 | 10 |
| 61-90 | 12 |
| 61-100 | 16 |

61-90 → 12.

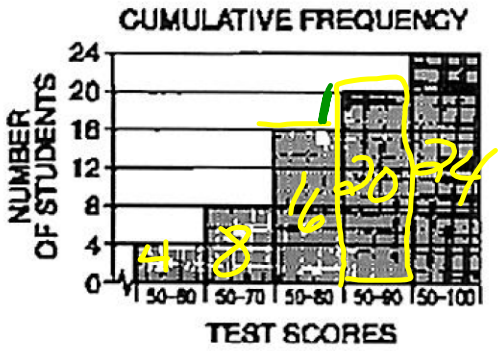
61-100 → 16

From 90% to 100% we increased by 4 scores

16-12=4

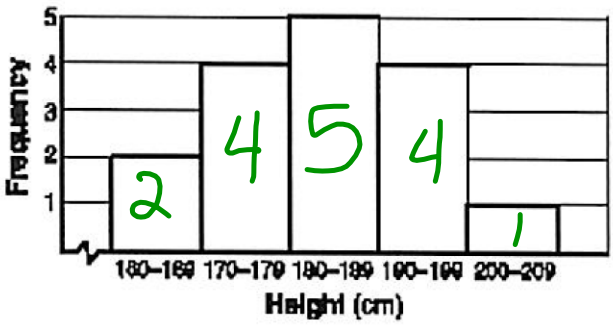
4 scores

5. The cumulative frequency histogram shows the scores that 24 students received on an English test. How many students had scores between81 and 90?




50-80 → 16
50-90 → 20
20-16 = 4 scores

6. The accompanying histogram shows the heights of the students in Adam's health class. What is the total number of students in the class?




2+4+5+4+1

16 students