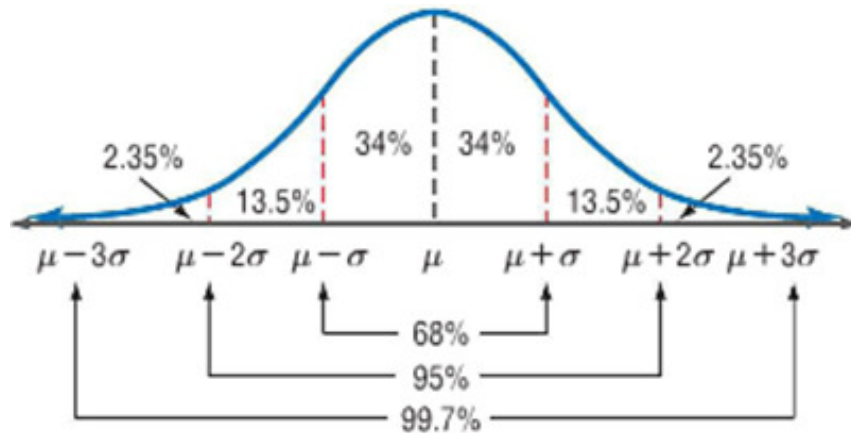


$\mu$  = mean and  $\sigma$  = standard deviation



*A teacher has 120 students, and their test scores had a normal distribution with an average test score of 85% and a standard deviation of 3%.*

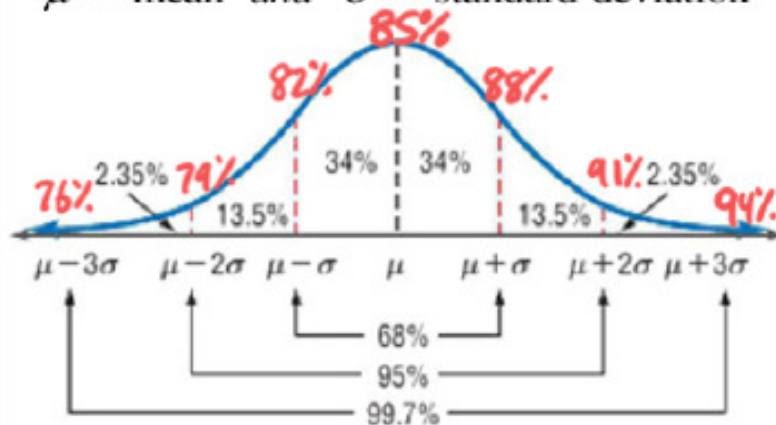
1) What test scores are one standard deviations from the mean?

2) What percent of the students got between 79% and 94% on the test?

3) About how many students got grades between zero and two standard deviations above the mean?

4) About how many students got grades below 82%?

$\mu$  = mean and  $\sigma$  = standard deviation



A teacher has 120 students, and their test scores had a normal distribution with an average test score of 85% and a standard deviation of 3%.

1) What test scores are one standard deviation from the mean?

82% and 88%

2) What percent of the students got between 79% and 94% on the test?

$$95 + 2.35 = \boxed{97.35\%}$$

3) About how many students got grades two standard deviations above the mean?  $34 + 13.5 = 47.5\%$

$$120(.475) = \boxed{57 \text{ students}}$$

4) About how many students got grades below 82%?

$$34 + 50 = 84 \begin{array}{r} 100 \\ -84 \\ \hline 16\% \end{array}$$

$$120(.16) = 19.2 \quad \boxed{19 \text{ students}}$$