

65, 70, 72, 75, 75, 78, 80, 81, 82, 85, 88, 89, 90, 92, 95

$$\text{Mean} = \frac{\sum x}{n} = \frac{1207}{15} = 80.466$$

$$\begin{array}{r} 80.466 \\ 15 \overline{) 1207} \\ \underline{120} \\ 70 \\ \underline{60} \\ 108 \end{array}$$

$$\text{Median} = 81$$

$$\text{Variance} = \frac{\sum (x - \bar{x})^2}{n}$$

$$\begin{array}{ll} (65 - 80.4)^2 & = 239 \\ (70 - 80.4)^2 & = 110 \\ (72 - 80.4)^2 & = 71 \\ (75 - 80.4)^2 & = 38 \\ (75 - 80.4)^2 & = 38 \\ (78 - 80.4)^2 & = 6 \\ (80 - 80.4)^2 & = 0.2 \\ (81 - 80.4)^2 & = 0.3 \\ (82 - 80.4)^2 & = 2 \\ (85 - 80.4)^2 & = 20.5 \\ (88 - 80.4)^2 & = 60 \\ (89 - 80.4)^2 & = 73 \\ (90 - 80.4)^2 & = 89 \\ (92 - 80.4)^2 & = 133 \\ (95 - 80.4)^2 & = 211 \end{array}$$

$$= \underline{\underline{1002}}$$

$$\frac{1002}{15} = \underline{\underline{66.8}}$$

Date : \_\_\_\_\_

Standard deviation =  $\sqrt{\text{Variance}}$

$$= \sqrt{66.82} \approx 8.17$$

Probability

2 values are above 90

hence

$$\frac{2}{15} = \underline{\underline{0.133}}$$

# WORKING OUT PAGIE

$$\begin{array}{r} 280.4 \\ - 65 \\ \hline 15.4 \end{array}$$

$$\begin{array}{r} 80.4 \\ - 70 \\ \hline 10.4 \end{array}$$

$$\begin{array}{r} 0.6 \\ 0.2 \\ \hline 3.60.16 \end{array}$$

$$0.133$$

$$\begin{array}{r} 120 \\ - 15 \\ \hline 50 \\ - 25 \\ \hline 50 \\ - 25 \\ \hline \end{array}$$

$$\begin{array}{r} 112.72 \\ - 80.1 \\ \hline 32.62 \end{array}$$

$$\begin{array}{r} 204 \\ - 75 \\ \hline 3.4 \end{array}$$

$$\begin{array}{r} 80.1 \\ - 60 \\ \hline 20.1 \end{array}$$

$$\begin{array}{r} 1 \\ - 0.1 \\ \hline 0.9 \end{array}$$

$$\begin{array}{r} 201 \\ - 98 \\ \hline 2.4 \end{array}$$

$$\begin{array}{r} 1.6 \\ - 0.0 \\ \hline 1.60.16 \end{array}$$

$$\begin{array}{r} 80.1 \\ - 45 \\ \hline 2.15.6 \end{array}$$

$$\begin{array}{r} 420.1 \\ - 80.1 \\ \hline 11.6 \end{array}$$

$$\begin{array}{r} 150 \\ 150 \\ 170 \\ 150 \\ 170 \\ 170 \\ 95 \\ 92 \\ 70 \\ 120.7 \end{array}$$

$$\begin{array}{r} 14.6 \\ - 14.6 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 18.4 \\ - 15.4 \\ \hline 3.0 \end{array}$$

$$\begin{array}{r} 10.4 \\ - 0.4 \\ \hline 10.0 \\ - 10.4 \\ \hline 10.8 \end{array}$$

$$\begin{array}{r} 42 \\ - 11.6 \\ \hline 30.4 \end{array}$$

$$\begin{array}{r} 15.8 \\ - 14.6 \\ \hline 1.2 \end{array}$$

$$\begin{array}{r} 11.6 \\ - 11.6 \\ \hline 0 \end{array}$$