Uncertainty in an average;

Absolute Uncertainty in an average of N numbers is;

$$= \sqrt{\frac{(Value\ 1 - Average)^2 + (Value\ 2 - Average)^2 + (Value\ 3 - Average)^2 + \cdots \ldots}{N(N-1)}}$$

Example;

Five values given are; 6, 8, 12, 5, 15, 20, 14, 0

The average is; $\frac{6+8+12+5+15+20+14+0}{8} = 10$

Absolute Uncertainty in an average of these 10 numbers is;

$$= \sqrt{\frac{(Value\ 1 - Average)^2 + (Value\ 2 - Average)^2 + (Value\ 3 - Average)^2 + \cdots \ldots}{N(N-1)}}$$

$$= \sqrt{\frac{(6-10)^2 + (8-10)^2 + (12-10)^2 + (5-10)^2 + (15-10)^2 + (20-10)^2 + (14-10)^2 + (0-10)^2}{10(10-1)}}$$

$$= \sqrt{\frac{(-4)^2 + (-2)^2 + (2)^2 + (-5)^2 + (5)^2 + (10)^2 + (4)^2 + (-10)^2}{10(9)}}$$

$$= \sqrt{\frac{16 + 4 + 4 + 25 + 25 + 100 + 16 + 100}{90}} = \sqrt{\frac{290}{90}} = \sqrt{3.2} = 1.79$$