

# *Arithmetic & Geometric Means*

## *Arithmetic Mean(average)*

$$AM = \frac{a_1 + a_2 + a_3 + \dots + a_n}{n}$$

## *Geometric Mean*

$$GM = \sqrt[n]{a_1 a_2 a_3 \dots a_n}$$

e.g. Find the *AM* and *GM* of 4 and 25

$$\begin{aligned} AM &= \frac{25 + 4}{2} \\ &= \frac{29}{2} \end{aligned}$$

$$\begin{aligned} GM &= \sqrt{25 \times 4} \\ &= \sqrt{100} \\ &= \underline{10} \end{aligned}$$

**Exercise 6F; 1ace etc, 2bd, 4, 7, 8ade, 10, 13, 19\***