

Paper Reference 1ST0/2H
Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Statistics
PAPER 2
Higher Tier
(Calculator)

Formulae Pages

**DO NOT RETURN THIS
FORMULAE BOOKLET WITH
THE QUESTION PAPER.**

Higher Tier Formulae

$$\text{Skew} = \frac{3(\text{mean} - \text{median})}{\text{standard deviation}}$$

$$\text{Standard deviation} = \sqrt{\frac{1}{n} \sum (x - \bar{x})^2}$$

An alternative formula for standard deviation is

standard deviation =

$$\sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2}$$

Spearman's rank correlation coefficient

$$r_s = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Rates of change

(e.g.

$$\text{Crude birth rate} = \frac{\text{number of births} \times 1000}{\text{total population}}$$