

# Category Kids Topics

Passwords, matching, number relations, figure relations, ordering ,paper cutting-folding, comparison, find different object, scales

# Category 1 Topics

Operations and Properties	Estimating with whole numbers; divide multi-digit whole numbers, order of operations
Introduction to Algebra	Variables and expressions, first degree equations and their solutions
Fractions and Decimals	Operations in fractions and decimals, mixed numbers, solving fraction and decimal equations, comparing and ordering fractions
Number Theory	Factors
Data Collection and Analysis	Mean, median, mode and range, variation, frequency, tables, histograms, box-and-whisker plots
Ratio	Ratio
Measurement and Geometry	Area of rectangles, parallelograms, triangles and trapezoids
Mental Math and Brain Teasers	Age/level appropriate analytical and critical thinking questions

$$\sqrt{\frac{N_2 \cdot 12^2}{N_1}}$$

$$x \rightarrow N \cdot \sqrt{N}$$



$$V(\bar{x}) = V\left(\frac{x_1 + x_2}{N}\right) = \frac{1}{N} \cdot N \cdot \sigma^2 = \frac{\sigma^2}{N}$$

$$V(\hat{\beta}) = \frac{\sigma^2}{\sum_{i=1}^n x_i^2}$$

$$P = kx$$



$$EQR = \frac{2M}{16}$$