

The City School

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| **Term 1** |
| **Unit** | **Topic** |
| Variations | • Direct Variation• Inverse Variation |
| Algebraic equations & Fractions | Algebraic representation and formulae Algebraic manipulation |
|  Indices |  Rules of Indices Different types of indices |
| PythagorasTheorem | Pythagoras theorem |
| TrigonometricRatios | • Trigonometric Ratios• Apply the sine, cosine and tangent ratios for acute angles to calculate:o an angleo a sides of a right angle triangle• Practical application oftrigonometry |
| Mensuration (A) | **Length of arc and area of Sector**• area and circumference of a circle• area and perimeter of shaded regions• arc length• area of sector• word problems |
| Mensuration (B) | Volume and surface area of:• a pyramid• a cone• a sphere• compound shapes |

**North Nazimabad Boys Campus**

**Syllabus for 1st Term**

**Mathematics**

**Class – 9**