مدرسة القديسة مريم الكاثوليكية الثانوية ـ دبي

ST. MARY'S CATHOLIC HIGH SCHOOL, DUBAI

ENTRANCE EXAMINATION 2026

MATHEMATICS PORTION – YEAR 10

(CALCULATOR)

NUMBERS:

- Fractions
- Decimals and Estimation – Estimating Calculations by rounding,
- Percentages – Increase/ Decrease , Compound interest, Original quantity
- Direct and Inverse proportion
- Indices

ALGEBRA :

- Sequences – To find the nth term of an arithmetic sequence.
- Expanding brackets and simplifying
- Changing subject of a formula
- Solving linear equations involving fractions also.
- Solving simultaneous equations.
- Solving quadratic equations by factorisation method.
- Graphs of a linear function
- Gradients of parallel / perpendicular lines.

GEOMETRY AND MEASURES:

- Angles and Polygons – To use angle properties of parallel lines, triangles, quadrilaterals, interior and exterior angles of polygons.
- Pythagoras Theorem
- Trigonometry in right angled triangles -To work out the missing sides and angles using trigonometry, to find the angle of elevation, depression.
- Area and circumference of a circle, Arc length and sector area
- Volume of prisms including cylinder, sphere , cone and pyramids.

STATISTICS:

- Estimating the mean from a grouped data.
- Probability – Mutually Exclusive, Independent Events, Tree diagrams (Conditional probability not included)
- Drawing and interpreting bar charts, pie charts and frequency polygons