

## **MEET 3**

### **3A Systems of Linear Equations in Two (or on occasion three) Variables**

- Numeric and literal systems
- Relation to graphical procedures
- Word problems leading to such systems
- Systems of inequalities used to define a region in the plane
- Determinants

### **3B Polygonal figures and solids**

- Special quadrilaterals and regular polygons (including area formulas)
- Intersecting diagonals
- Ptolemy's Theorem
- Polygonal prisms & pyramids (including volume and surface area)

### **3C Trigonometry**

- Law of sines, law of cosines
- Inverse functions and their graphs
- Solving trigonometric equations
- De Moivre's Theorem and the roots of unity

### **3D Exponents and Logarithms**

- Use of fractional, negative exponents
- Simplifying expressions involving radicals
- Solving equations involving radicals
- Use of logarithms; identities involving logarithms
- Solving logarithmic equations
- Relationships between logarithms to different bases
- **2013-2014 Challenge Topic: Basimal Fractions**