TOPIC	Y	NY
Pythagoras		
• Finding the **missing side lengths** in a right-angle triangle		
• Finding missing side lengths given **complex shapes** with right triangles		
• Using **algebraic expressions** to represent missing side lengths in a right triangle		
• Finding side lengths using **irrational notation** (ex.: x = $\sqrt{number}$, **no rounding**)		
Algebra		
• Adding, Subtracting polynomials (with and without **brackets**)		
• Multiplying polynomials using the **distributive property** (binomial x trinomial)		
• **Division** of a polynomial by a monomial (**rules of exponents** applied here)		
• **Isolating** variables and solving for 'x', given **fractions**		
• Using algebraic expressions to represent the **perimeter** and **area** of complex shapes		
Rules of Exponents		
• **Multiplying** and **Dividing** powers with the same base		
• **Negative exponents**		
• **Powers** of **powers**		
• **Changes of base**		
Linear Equations		
• How to identify the **INITIAL VALUE** ('**b**') on a **GRAPH** (Y-intercept)		
• How to find the **SLOPE** of a line ('a = $\frac{y_2 - y_1}{x_2 - x_1}$')		
• How to find the **EQUATION** of a line given the **SLOPE** and a **POINT** on the line		
• How to find the **EQUATION** of a line given **TWO POINTS** on the line		
• How to find an **X-INTERCEPT**, given an **EQUATION** or a **WORD PROBLEM**		
• How to find a **Y-INTERCEPT**, given an **EQUATION** or a WORD PROBLEM		
Scientific Notation		
• **Adding**, **Subtracting**, **Multiplying** and **Dividing** numbers written in S.N.		
• **Converting** numbers written in standard notation into S.N. and vice-versa		

Inequalities		
• How to **isolate a variable** in a complex **inequality** (remember: **switching the sign**)		
• Expressing inequalities in: **number lines**, **interval** notation, **set-builder** notation		
Surface Area		
• **Solving for unknown** side lengths given perimeters and/or areas **complex shapes**		
• Area and Perimeter of **Squares**		
• Area and Perimeter of **Rectangles**		
• Area and Perimeter of **Triangles**		