**UNIT 1 – TRIGONOMETRY**

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| Trigonometry describes the relationship between the **angles** and **lengths** of triangles. It helped our forefathers plot the stars and navigate the seas.  Nowadays, trigonometry is found in everything from architecture to military. While it may seem as if trigonometry is never used outside of the classroom, you may be surprised to learn just how often trigonometry and its applications are encountered in the real world.   * Architecture * Engineering * Music theory and Production * Electrical Engineers and Electricians * Manufacturing Industry |



**WHAT YOU’LL LEARN**

To determine the measures of sides and angles in right, acute triangles and to solve related problems.

**AND WHY**

Applications of trigonometry arise in land surveying, navigation, cartography, computer graphics, machining, medical imaging, and meteorology, where problems call for calculations involving angles, lengths, and distances using indirect measurements.

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| **DAY** | **LESSON** | **HOMEWORK/ ASSESSMENT** |
| * 1 | Trigonometric Ratios: *Calculating Side Lengths* | Page 13 to 15 #4, 7, 8 |
| * 2 | Trigonometric Ratios: *Calculating Angles* | Page 13 to 15 #5, 9, 10 |
| * 3 | Applications of Trig Ratios | **QUIZ 1 on DAYS 1 & 2**  Page 15 #11, 12 and Page 22 #4 - 6, 8, 11 and 12 |
| * 4 | The Sine Law | Page 31 #1 – 5, 8, 10 and 13 |
| * 5 | The Cosine Law | **QUIZ 2 on DAY 3 & 4**  Page 39 #1 – 4, 7, 8 and 11 |
| * 6 | Solving Problems using Trigonometry | Page 48 #2 – 4, 6 – 8, 10, 11 and 14 |
| * 7 | Unit Review | Page 52 #1 – 17 and Page 54 #1 – 10 |
| * 8 | Unit Test |  |