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| **F Unit 3: Pythagoras and trigonometry** | **Year 10 Road Map** |
| In this unit you will learn about Geometry & measures. The aims are as follows:**LG1**: Knowledge **LG2**: Application **LG3**: SkillsAssessment Grades: |
| **S/N** | **Learning Goals/Outcomes/Content** | **Video Clips** | R A G |  |  |
| 1 | Understand, recall and use Pythagoras’ Theorem in 2D, including leaving answers in surd form; | 150a, 150b |  |  |  |
| 2 | Given 3 sides of a triangle, justify if it is right-angled or not; | 150a, 150b |  |  |  |
| 3 | Calculate the length of the hypotenuse in a right-angled triangle, including decimal lengths and a range of units; | 150a, 150b |  |  |  |
| 4 | Find the length of a shorter side in a right-angled triangle;  | 150a, 150b |  |  |  |
| 5 | Apply Pythagoras’ Theorem with a triangle drawn on a coordinate grid; | 150a, 150b |  |  |  |
| 6 | Calculate the length of a line segment AB given pairs of points;  | 150a, 150b |  |  |  |
| 7 | Understand, use and recall the trigonometric ratios sine, cosine and tan, and apply them to find angles and lengths in general triangles in 2D figures;  | 168 |  |  |  |
| 8 | Use the trigonometric ratios to solve 2D problems;  | 168 |  |  |  |
| 9 | Find angles of elevation and depression;  | 168 |  |  |  |
| 10 | Round answers to appropriate degree of accuracy, either to a given number of significant figures or decimal places, or make a sensible decision on rounding in context of question; | 32, 90 |  |  |  |
| 11 | Know the exact values of sin *θ*, cos *θ* for *θ* = 0°, 30°, 45°, 60° and 90°; know the exact value of tan *θ* for *θ* = 0°, 30°, 45° and 60°. | 173 |  |  |  |

Student’s comments or questions.