Student’s comments or questions

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| **H Unit 6: Graphs of trigonometric functions and further trigonometry** | | **Year 10 Road Map** | | | | |
| In this unit you will learn about trigonometry. The aims are as follows:  **LG1**: Knowledge  **LG2**: Application  **LG3**: Skills  Assessment Grades | | | | | | |
|  | **Learning Goals/Outcomes/Content** | | Video clips | R A G |  |  |
| **6a Graphs of trigonometric functions** | | | | | | |
| 1 | Recognise, sketch and interpret graphs of the trigonometric functions (in degrees)  *y* = sin *x*, *y* = cos *x* and *y* = tan *x* for angles of any size. | | 195a, 195b |  |  |  |
| 2 | Know the exact values of sin *θ* and cos *θ* for *θ* = 0°, 30°, 45° , 60° and 90° and exact value of tan *θ* for *θ* = 0°, 30°, 45° and 60° and find them from graphs. | | 173 |  |  |  |
| 3 | Apply to the graph of *y* = f(*x*) the transformations *y* = –f(*x*), *y* = f(–*x*) for sine, cosine and tan functions f(*x*). | | 196b |  |  |  |
| 4 | Apply to the graph of *y* = f(*x*) the transformations *y* = f(*x*) + *a*,  *y* = f(*x* + *a*) for sine, cosine and tan functions f(*x*). | | 196b |  |  |  |
| **6b Further trigonometry** | | | | | | |
| 5 | Know and apply Area = *ab* sin *C* to calculate the area, sides or angles of any triangle. | | 203 |  |  |  |
| 6 | Know the sine and cosine rules, and use to solve 2D problems (including involving bearings). | | 202a, 202b |  |  |  |
| 7 | Use the sine and cosine rules to solve 3D problems. | | 218 |  |  |  |
| 8 | Understand the language of planes, and recognise the diagonals of a cuboid. | | 218 |  |  |  |
| 9 | Solve geometrical problems on coordinate axes. | |  |  |  |  |
| 10 | Understand, recall and use trigonometric relationships and Pythagoras’ Theorem in right-angled triangles, and use these to solve problems in 3D configurations. | | 218 |  |  |  |
| 11 | Calculate the length of a diagonal of a cuboid. | | 218 |  |  |  |
| 12 | Find the angle between a line and a plane. | | 218 |  |  |  |