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| **Topic 3: Geometry and Trigonometry** | **Sine and Cosine Models** | |
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| 1. Let for and let .  The function can be written in the form .     1. The range of is . Find and .    2. Find the range of .    3. Find the value of and .    4. Find the period of . | | (3 marks)  (2 marks)  (3 marks)  (2 marks) |
| Mark scheme:   1. Correct working with the amplitude and vertical translation.   and | | (M1)  (A1)(A1)  (A1)(A1)  (M1)  (A1)(A1)  (M1)(A1) |