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| **Topic 3: Geometry and Trigonometry** | **Sine and Cosine Curves** | | |
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| 1. The depth of water on Fripp Island, SC, is modelled by the function , for , where is the number of hours after high tide. At high tide, the depth is 6.48 ft. At low tide, which is approximately 6 hours later, is 0.5 ft.    1. Find the value of    2. Find the value of    3. Use the model to find the depth of water 10 hours after high tide | | | (2 marks)  (2 marks)  (2 marks) |
| Mark scheme: | | (M1) (A1)  (M1)  (A1)  (M1)  (A1) | |