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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) |