

**Answer on Question #77126 – Math – Trigonometry
Question**

Mr Mcbean is a very keen fisherman who will go fishing at any time of the day or night. He requires 1.5 metres of water at the boat ramp (i.e. 1.5 above the mean sea level) to launch his boat the "periodic function". The next high tide occurs at 2 am at a height of 2.8m above the mean sea level.

Find the times in the first 24 hours after 2am when he is able to launch his boat.

Solution

Tidal waves obey the harmonical function which has maximums at 2 am. If you will study a lot of this harmonical function, you can see that it has a value of 1.5 twice in a period, and its period is 24 hours. So, mr Mcbean can launch his boat twice in a period (twice in 24 hours).