1. On a cruise across the central Pacific Ocean (depth = 5000 m) you measure the period of the swells around the ship at 17.0 seconds. Assuming that this swell is behaving as a deep-water wave, what is its celerity (speed) in m/s rounded to the nearest tenth?

   \[ C = \text{__________ m/s} \]

2. What is the wavelength (L) of this wave rounded to the nearest whole meter?

   \[ L = \text{__________ m/cycle} \]

3. As this wave approaches shore, at what depth will it:

   a) Begin to “feel” the bottom? (Round to nearest whole m.)

   \[ D_{\text{feel}} = \text{__________ m} \]

   b) Begin to behave as a shallow-water wave? (Round to nearest whole m.)

   \[ D_{\text{sw}} = \text{__________ m} \]

4. How fast will this wave travel across a bay with an average depth of 6.5 m? Round its celerity to the nearest tenth of a m/s.

   \[ C = \text{__________ m/s} \]
5. With the Earth, Sun and Moon in the positions shown below, what type of tide will occur in coastal city A?

High or low? __________

Spring or neap? __________