

**DIRECTORATE SENIOR CURRICULUM MANAGEMENT (SEN-FET)**

**HOME SCHOOLING SELF-STUDY WORKSHEET**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SUBJECT** | Maritime Economics | **GRADE** | 11 | **DATE** | 6/4/20 |
| **TOPIC** | Shipping Operations | **TERM 1****REVISION** | X | **TERM 2 CONTENT** | x |
| **TIME ALLOCATION** | 15min | **TIPS TO KEEP HEALTHY**1. **WASH YOUR HANDS** thoroughly with soap and water for at least 20 seconds. Alternatively, use hand sanitizer with an alcohol content of at least 60%.2. **PRACTICE SOCIAL DISTANCING** – keep a distance of 1m away from other people.3. **PRACTISE GOOD RESPIRATORY HYGIENE**: cough or sneeze into your elbow or tissue and dispose of the tissue immediately after use.4. **TRY NOT TO TOUCH YOUR FACE.** The virus can be transferred from your hands to your nose, mouth and eyes. It can then enter your body and make you sick. 5. **STAY AT HOME.**  |
| **INSTRUCTIONS** | This worksheet is to be completed in your MRTE exercise/activity book. |

**Question 6**

*6.1 Halifax Sun* went ashore on a beach near Oslo. A tug tried several times to tow her off the beach during the first high tide on the day, but the refloating attempts failed. The tug owner decides to wait until the next high tide before making another attempt to refloat the ship. The following are the tide table for the area on the day the ship went ashore and when the tug attempted to pull her off. The first row of the figures is the time (eg. 01=01:00 which is 1am in the morning;14=14:00 which is 2pm in the afternoon). The second row of figures is the depth of water (in meters) above the average low spring tide level. The average low spring tide depth of water where the ship has grounded is 11.0meters.

01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0.18 0.52 1.0 1.51 1.93 2.16 2.14 1.85 1.41 0.90 0.47 0.23 0.19 0.48 0.89 1.36 1.77 2.03 2.06 1.86 1.46 0.96 0.5

6.11 When is the next high tide? (2)

6.1.2 What is the depth of the water at the high tide? (2)

6.1.3 The salvage operators have calculated they’ll need a depth of 12.6meters to refloat the ship.

6.1.3.1 Between which hours will the water depth be greater than 12.6 meters? (4)

6.1.3.2 When is the water depth the greatest? (2)

6.1.3.3 What is the greatest water depth after 1300 on that day? (2)

6.1.3.4 What is the term for the agreement between the shipowner and the tug owner that governs the salvage of the ship? (2)

6.1.3.5 Would the tug’s salvage claim be upheld for this operation if no damages have occurred at the bottom of the ship? (2)