

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

**HOME SCHOOLING SELF-STUDY WORKSHEET**

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| **SUBJECT** | Nautical Science | **GRADE** | 12 | **DATE** | 6/4/20 |
| **TOPIC** | Practical Chartwork | **TERM 1****REVISION** | X | **TERM 2 CONTENT** | X |
| **TIME ALLOCATION** | 20min | **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.All work done on the chart must be done lightly using a 2B pencil.Courses and bearings and corrections must be calculated to the nearest ½° and plotted to a similar accuracy.Variation of 17° W is applicable where required.Scientific calculators may be used.Nautical tables may be used. |

**QUESTION 5**

A vessel is approaching Cape Town on a compass course 158° (C) at 05:00 and the observed position is Robben Island Lt. bearing 142° (C) × 11,5 miles. Using the Chart SAN 3002 provided, plot the position and determine the following:

1.1 The compass course to steer to the next alter course position, Robben Island Lt. bearing 043° (T) × 4,9', given:

* speed through the water is 10 knots
* current is estimated to be setting 170° (T) at 2 knots
* estimated leeway from a Westerly wind is 7° (15)

1.2 From this last alter course position, what is the true course to steer to arrive at the pilot rendezvous position north of Green Point Lighthouse? Plot the course on the chart. (5)

 **[20]**