

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

**HOME SCHOOLING SELF-STUDY WORKSHEET**

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| **SUBJECT** | Nautical Science | **GRADE** | 12 | **DATE** | 15/4/20 |
| **TOPIC** | SEAMANSHIP | **TERM 1****REVISION** | X | **TERM 2 CONTENT** | X |
| **TIME ALLOCATION** | 40min | **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 12**

Your vessel is steering a course 163° (T) at a reduced speed of 5 knots due to poor visibility of less than 1 000 m. You detect a radar target astern that you have been plotting with the following bearings and ranges:

|  |  |  |
| --- | --- | --- |
| **TIME** | **BEARING** | **RANGE** |
| 20h00 | 255° (T) | 10,0 M |
| 20h10 | 255° (T) | 8,0 M |
| 20h20 | 255° (T) | 6,0 M |
| 20h30 | 255° (T) | 4,0 M |

12.1 Plot the target's movements on the plotting sheet provided.(5)

12.2 Prepare a full target report. (10)

12.3 What action would you take to avoid collision with this target? (5)

 **[20]**