

**Axe Yacht Club**

**RYA Yachtmaster Shorebased Course**

**Chartwork Practice Examples 1 – Solutions**

**Question 1**

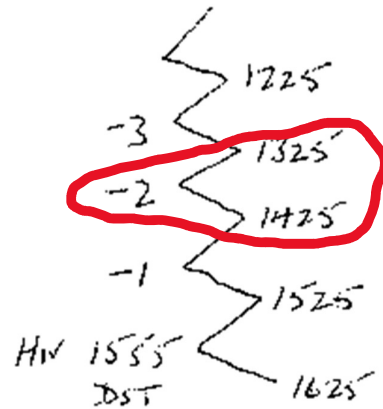
Victoria

HW 1455UT / 1555 DST 5.0m      LW 0840UT 0.9m => Range = 4.1m

Tidal stream:

1330 – 1400 DST = HW -2

<>J HW-2 120° 3.7Sp / 1.9Np => Int 2.8kn



Tidal Diamond	Tidal Hour	Set (°T)	Spring Rate (knots)	Neap Rate (knots)	Range of Tide (m)	Interpolated or Extrapolated Rate (S) in knots	Duration in minutes (T)	Drift to use = S x (T/60) in nautical miles
J	-2	120	3.7	1.9	4.1	2.8	30	1.4

Plot:



Course to Steer

T	V	M	D	C
235	+6W	241	+2W	243

**Answer = 243°C**

## Question 2

September 12<sup>th</sup> Victoria

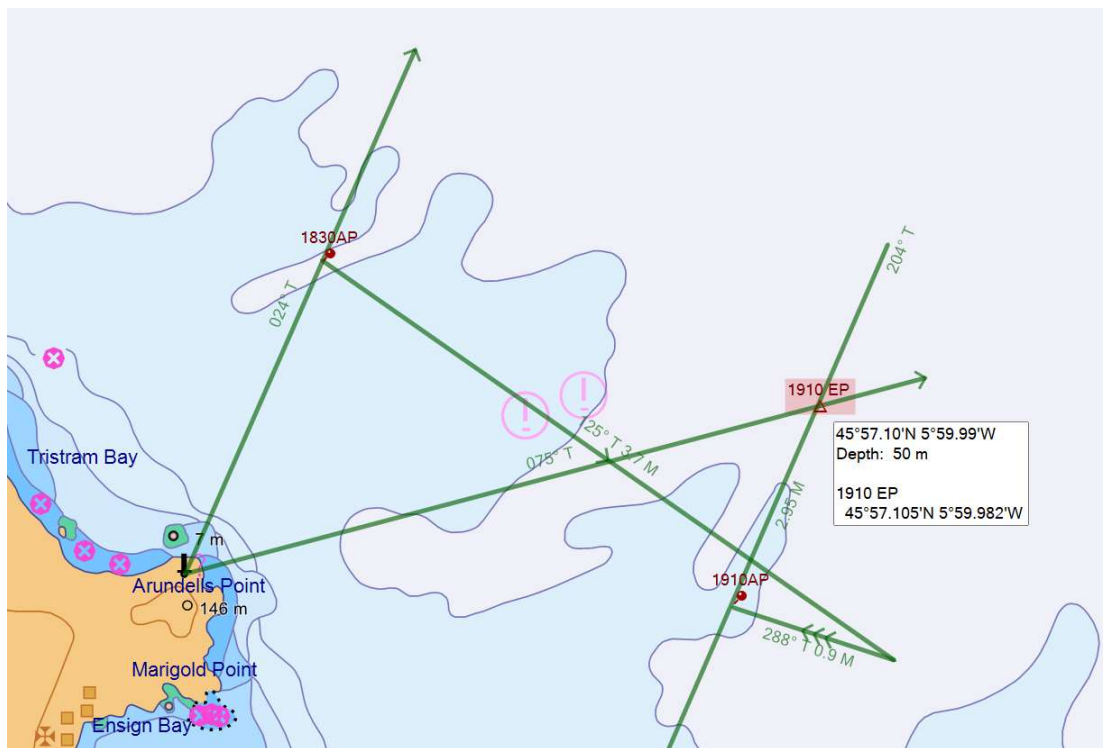
HW 1355UT / 1555 SPDST 5.2m LW 2000UT / 2200 SPDST 1.1m Range = 4.1m

1830 to 1910 SPDST fall in tidal hour HW+3

<>J HW+3 => 288T 1.6Sp / 0.8Np Interpolated = 1.3kn (0.9nm for 40mins).

C	D	M	V	T
125	+6E	131	-6W	125
		210	-6W	204
		261	-6W	255

Plot



**1910 SPDST EP = 45°57.1'N / 006°00.0'W**

# Question 3

Question 3

## Secondary Ports Tidal Heights

Process to mark up the tidal curve.

Secondary Port = **ST KILDA**

Standard Port = **COLVILLE**

Date = **FRIDAY 10 MAY (PM)**

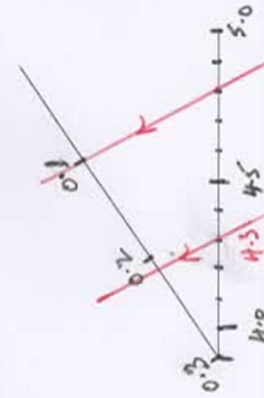
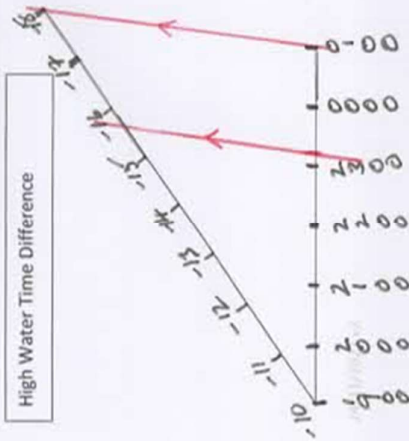
Standard Port	HW Time	HW Height	LW Time	LW Height	Range	3.4 m
Difference	<sup>5:57</sup> 23:12 <sup>UT</sup>		4:3		0.9 m	
Secondary Port	<del>00:16</del>		<sup>5:57</sup> 4:2		1.3 m	
Secondary Port corrected for DST if required	<sup>5:57</sup> 23:06 <sup>DST</sup>		4:5			

Fill in the unshaded boxes and then use the values in the secondary port boxes to mark up the Standard Port Tidal Curve.

High Water Time Difference

High Water Height Difference

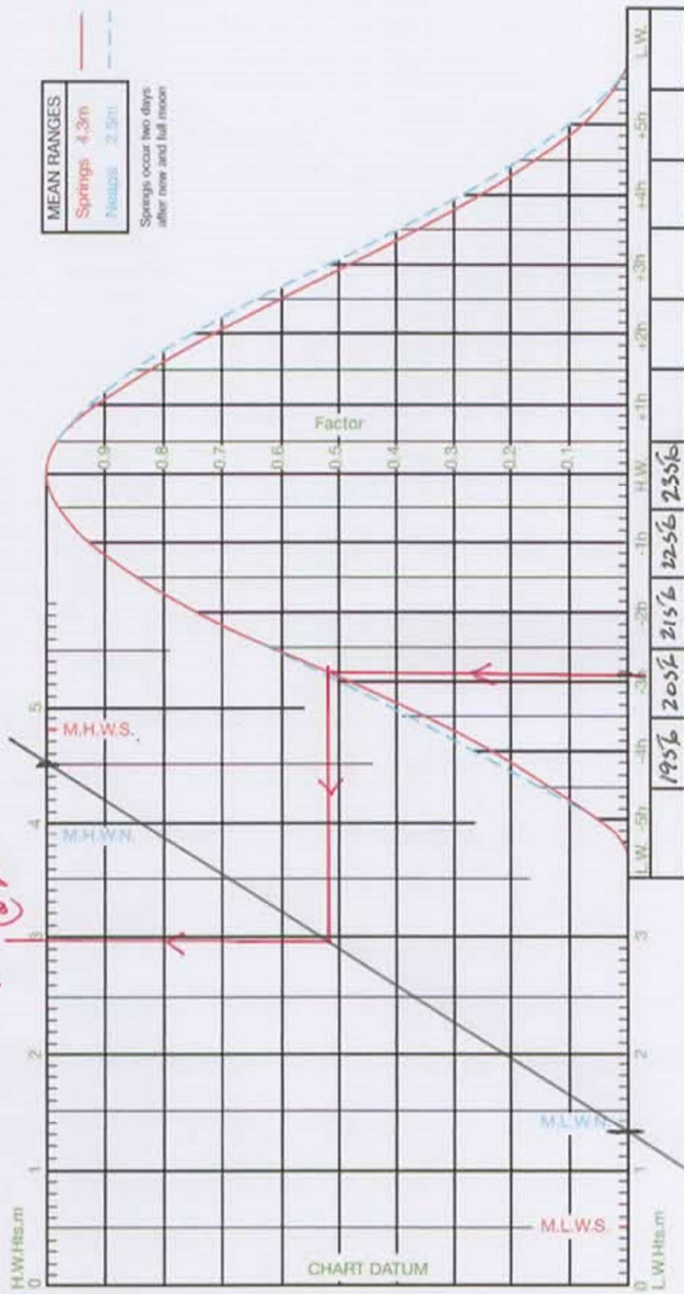
Low Water Height Difference



Question 3.

FRIDAY 10 MAY - ST KILDA.

HOT @ 2100 SPDST



Answers: (a) HOT @ 2100 SPDST = 3.0m Depth on Sx contour = 8.0m.  
 (b) Depth @ HW = 8.0 + 1.5 = 9.5m. Chain req'd = 9.5 x 4 = 38m