



ISA Dinghy Instructor Pre Entry Paper 2

SAIL THEORY

1. What direction, in relation to the wind, should you position your boat when rigging?

2. Describe the sequence for rigging the mainsail on a double handed dinghy. (light winds)

3. Explain how to get “out of irons” on a double handed dinghy.

4. When bearing away in your dinghy, explain how boat trim can aid this manoeuvre.

5. How would you adjust your primary sail tuning controls for the following sailing directions (in moderate conditions):

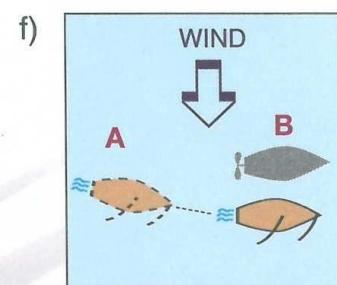
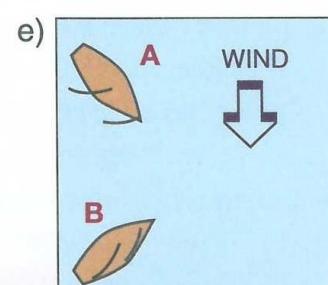
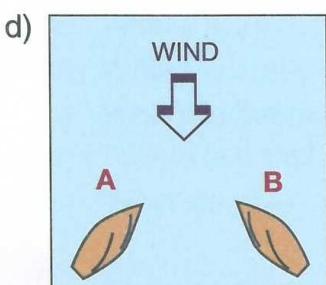
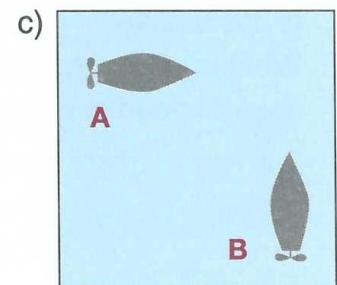
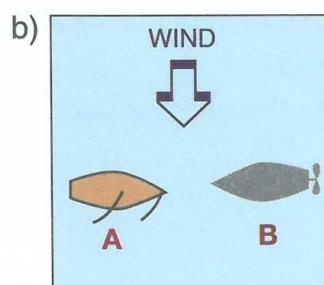
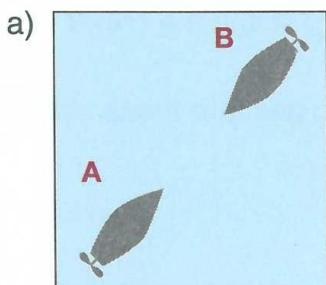
Upwind

Downwind

RULES OF THE ROAD AND COLLISION REGULATIONS

TYPE OF BUOY			
WHAT IT SIGNIFIES			
ACTION TAKEN			

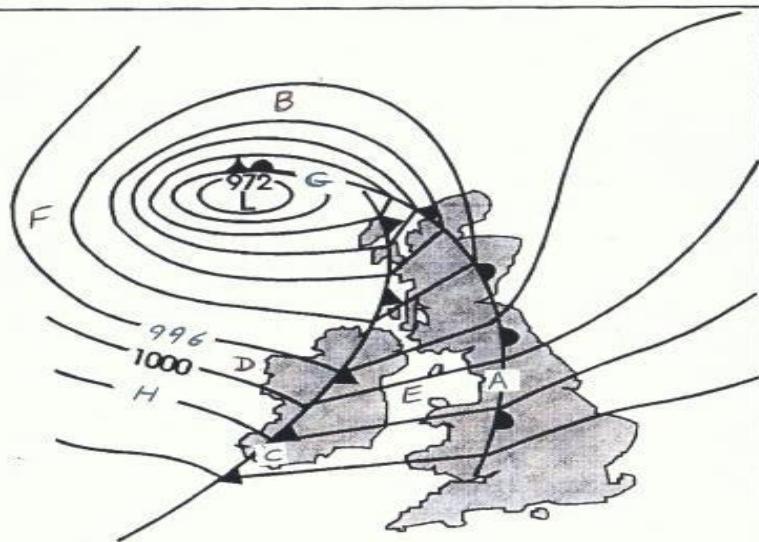
8. In the following diagrams a risk of collision exists. Which is the give-way vessel? What action should it take?



ON THE SYNOPTIC CHART BELOW, MATCH THE LETTERS A TO H TO THE DISCRIPTIONS PROVIDED:

DESCRIPTION	Answer	MARKS
WHAT IS THE WIND DIRECTION AT B		1
WIND WEST WESTERLY FORCE 7-8		1
IS THE AIR AT E WARMER OR COLDER AIR		1
WHICH LETTER IS THE 1004 HECTO PASCAL ISOBAR		1
WHICH LETTER IS THE WARM FRONT		1
WHICH LETTER IS THE COLD FRONT		1
WHICH LETTER IS THE OCCLUDED FRONT		1
IS THE AIR AT D WARMER AIR OR COLDER AIR		1

CHOOSE ANSWER (X) OR (Y):	LETTER	MARKS
AT POINT A, WHAT CHANGES WOULD YOU EXPECT AFTER THE FRONT PASSES? WIND WILL: (X) BACK IN DIRECTION OR (Y) VEER IN DIRECTION		1
AT POINT E, WOULD YOU EXPECT THE CONDITIONS TO BE: (X) OVERCAST WITH DRIZZLE OR (Y) SUNNY AND CLEAR		1
AT POINT E, IS THE WIND: (X) ON SHORE OR (Y) OFF SHORE		1
WHAT IS THE DIRECTION OF AIRFLOW AROUND THE LOW PRESSURE (972Hpa) (X) CLOCKWISE OR (Y) ANTI CLOCKWISE		1



CHARTWORK AND TIDES.

Refers to ISA Training Chart No. 1

1. Mark the 5 metre line on the accompanying chart of Baltimore Harbour.
2. Mark a drying rock on the chart.
3. What is the time and height of high water on the morning of February 11th 2015?

What is the depth of water in Baltimore Harbour at high water on this date?

What is the depth of water in Baltimore Harbour at 11:40 on the same day?

4. What is a knot (as in boat speed)?
5. What is the distance between Baltimore Quay and the quay on Sherkin Island?
6. A small fleet of Wayfarers are going to picnic from the North Pier in Baltimore Harbour to Horseshoe Harbour outside the entrance to Baltimore Bay on the ISA training chart. Given the following conditions, complete the questions:

The wind is SW F2, good weather, average boat speed is 2 knots. The tide is rising with a tidal current of 1 knot in the same direction as the wind.

 - a. What is the distance from the North Pier to Sherkin quay (including tacking- allow 50% additional distance with tacking)?
 - b. How long will it take to get there (with tides)?
 - c. What is the distance back to North Pier?
 - d. How long will this take (assume 1 knot average tidal current over whole distance)?
 - e. What dangers will be encountered on the route?