

U.S.C.G. Merchant Marine Exam

Mate Less than 500-1600 Gross Registered Tons

Q140 Navigation Problems - Chart 13205TR

(Sample Examination)

Choose the best answer to the following Multiple Choice questions.

1. The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel draws 8 feet (2.4 meters), and the height of eye is 24 feet (7.3 meters).
Use 15°W variation where required. The gyro error is 2°W.
"Per standard magnetic compass" is abbreviated "psc".

DEVIATION TABLE

<u>Magnetic Heading</u>	<u>Deviation</u>
030°	3.0°E
060°	1.0°E
090°	1.0°W
120°	3.0°W
150°	4.0°W
180°	4.0°W
210°	3.0°W
240°	1.0°W
270°	1.0°E
300°	3.0°E
330°	4.0°E
360°	4.0°E

You are steering 087° pgc and turning for 6.8 knots.

At 0600, you take the following bearings:
Little Gull Island Light bearing 089.5° pgc
Bartlett Reef Light bearing 047 ° pgc

What is your 0600 position?

- (A) LAT 41°11.7'N, LONG 72°14.4'W
- (B) LAT 41°12.5'N, LONG 71°14.9'W
- (C) LAT 41°12.1'N, LONG 72°13.8'W
- (D) LAT 41°11.2'N, LONG 72°14.6'W

If choice C is selected set score to 1.

2. If you change course at 0610, what is the course to steer to a point where Little Gull Island Light bears $180^{\circ}T$ at 0.7 mile (Point "A")?

- (A) $080^{\circ}pgc$
- (B) $084^{\circ}pgc$
- (C) $072^{\circ}pgc$
- (D) $076^{\circ}pgc$

If choice A is selected set score to 1.

3. What is your ETA at point "A"?

- (A) 0702
- (B) 0640
- (C) 0655
- (D) 0651

If choice D is selected set score to 1.

4. You calculate that the current will be ebbing at the Race at 0700. You should expect to be set in which general direction at the Race?

- (A) North
- (B) Northeast
- (C) West
- (D) East

If choice D is selected set score to 1.

5. If your fathometer is set to fathoms, it should read approximately how many fathoms at point "A"?

- (A) 24 fathoms
- (B) 38 fathoms
- (C) 35 fathoms
- (D) 28 fathoms

If choice D is selected set score to 1.

6. From point "A", you lay out an intended track line to a point where Block Island North Light bears $180^{\circ}T$ at 2.9 miles (Point "B"). What is the length of this leg of the voyage?

- (A) 20.4 miles
- (B) 23.7 miles
- (C) 23.9 miles
- (D) 24.4 miles

If choice D is selected set score to 1.

7. What is the course per standard magnetic compass between points "A" and "B"?

- (A) 099.5°
- (B) 094.5°
- (C) 098.5°
- (D) 095.5°

If choice C is selected set score to 1.

8. At 0715 you take the following bearings:

Race Rock Light 328°pgc
Little Gull Island Light 249°pgc
Mt. Prospect Antenna 036°pgc

Based on your 0715 fix, which statement is TRUE?

- (A) Your fathometer reads about 265 fathoms.
- (B) You are governed by the Inland Rules.
- (C) You are in a cable area.
- (D) You are to the left of your track line.

If choice D is selected set score to 1.

9. From your 0715 position, you set a course of 085°T.

At 0745 you take the following bearings:

Race Rock Light 278°pgc
Watch Hill Light 049°pgc
Fisher's Island East Harbor Cupola 010°pgc

What was the current encountered between 0715 and 0745?

- (A) Set 216°T, drift 0.3 knot
- (B) Set 030°T, drift 0.4 knot
- (C) Set 070°T, drift 0.6 knot
- (D) Set 238°T, drift 0.9 knot

If choice C is selected set score to 1.

10. The wind is southerly, and you estimate 3° leeway. Allowing for leeway, what is the course to steer from your 0745 position to pass 1 mile south of Watch Hill Buoy "WH"?

- (A) 087°pgc
- (B) 079°pgc
- (C) 081°pgc
- (D) 085°pgc

If choice A is selected set score to 1.

11. From your 0745 fix, you change course to pass 1.0 mile south of buoy "WH" and estimate your speed at 7 knots. If the visibility clears, what is the earliest time you can expect to see Block Island North Light tower?

- (A) 0807
- (B) 0750
- (C) 0838
- (D) 0845

If choice A is selected set score to 1.

12. Which statement describes the shore between Watch Hill Point and Point Judith?

- (A) Sandy beaches broken by rocky points
- (B) Low, rocky cliffs
- (C) Heavily wooded hills
- (D) Barren hills with prominent buildings

If choice A is selected set score to 1.

13. At 0830, Watch Hill Point bears $343^{\circ}T$ at 3.5 miles by radar. What was the speed made good since 0745?

- (A) 5.8 knots
- (B) 6.7 knots
- (C) 5.4 knots
- (D) 7.1 knots

If choice D is selected set score to 1.

14. At 0900, you take the following radar ranges:
Watch Hill Point 5.4 miles
Block Island Grace Point 8.3 miles

Which statement about this fix is TRUE?

- (A) You are to the left of the track line.
- (B) The bottom in the area is sand and gravel.
- (C) The fix is indeterminate.
- (D) You are governed by the Inland Rules.

If choice C is selected set score to 1.

15. At 0930, your position is LAT $41^{\circ}16.5'N$, LONG $71^{\circ}41.4'W$, and you are turning for 7 knots. Allowing 3° leeway for southerly winds and estimating the current as 035° at 0.3 knot, what is the course to steer (pgc) to point "B"?

- (A) 089° pgc
- (B) 094° pgc
- (C) 091° pgc
- (D) 096° pgc

If choice D is selected set score to 1.