

U.S.C.G. Merchant Marine Exam
Mate Offshore Supply Vessels
Q213 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 draft is 18 feet (5.4 meters) and the height of eye is 20 feet (6.1 meters)
Gyro error is 3°W
Use a variation of 15°W for the entire plot

"Per standard magnetic compass" is abbreviated "psc"

DEVIATION TABLE

<u>Magnetic Heading</u>	<u>Deviation</u>
000°	1.5°E
030°	2.5°W
060°	2.5°W
090°	2.0°W
120°	1.0°W
150°	0.5°W
180°	0.0°
210°	1.0°E
240°	1.5°E
270°	2.0°E
300°	1.0°E
330°	0.5°W

At 0630, Buoy "PI" is close abeam on the starboard side. You are steering 078°T and are headed directly toward Race Rock Light.

At 0654, Little Gull Island Light is bearing 210°pgc and Race Rock Light is bearing 075°pgc.

What is your 0654 position?

- (A) LAT 41°14.0'N, LONG 72°05.3'W
- (B) LAT 41°14.2'N, LONG 72°06.8'W
- (C) LAT 41°19.0'N, LONG 72°05.2'W
- (D) LAT 41°14.4'N, LONG 71°54.6'W

If choice A is selected set score to 1.

2. What was the course made good from 0630 to 0654?

- (A) 086°T
- (B) 078°T
- (C) 090°T
- (D) 082°T

If choice D is selected set score to 1.

3. What course should you steer by the standard magnetic compass in order to maintain a heading of 081°pgc?

- (A) 062°psc
- (B) 080°psc
- (C) 090°psc
- (D) 095°psc

If choice D is selected set score to 1.

4. At 0705, you change course to 096°T. At this time, Race Rock Light is bearing 000°T at 0.35 mile. You are now governed by which Navigation Rules?

- (A) COLREGS
- (B) Coastal Fishery Rules
- (C) Local Pilot Rules
- (D) Inland Rules

If choice A is selected set score to 1.

5. At 0728, Race Rock Light is bearing 282°T at 3.8 miles, and the closest point on Fishers Island has a radar range of 2.1 miles. What speed have you been making since you changed course at 0705?

- (A) 9.6 knots
- (B) 11.2 knots
- (C) 9.1 knots
- (D) 10.8 knots

If choice A is selected set score to 1.

6. At 0727, the cupola on Fishers Island is in line with Latimer Reef Light bearing 024°pgc. Based on this, the gyro error is _____.

- (A) 3°W
- (B) 1°E
- (C) 2°E
- (D) 0°

If choice A is selected set score to 1.

7. At 0748, you take the following bearings:
Watch Hill Point Light bearing 026.5°pgc
Race Rock Light bearing 275.5°pgc

What is the approximate depth of water under the keel at this position?

- (A) 325 feet (98.5 meters)
- (B) 130 feet (39.4 meters)
- (C) 112 feet (33.9 meters)
- (D) 175 feet (53.0 meters)

If choice C is selected set score to 1.

8. At 0748, you change course to 160°T, speed 10 knots. At what time will you cross the 120-foot curve the first time?

- (A) 0804
- (B) 0754
- (C) 0800
- (D) 0808

If choice B is selected set score to 1.

9. At 0815, Montauk Pt. Light House is bearing 172°T, Shagwong Pt. has a radar range of 4.5 miles. If the engine was making turns for 10 knots, what was the current since 0748?

- (A) Set 220°T, drift 1.6 knots
- (B) Set 040°T, drift 0.7 knots
- (C) Set 220°T, drift 0.7 knots
- (D) Set 040°T, drift 1.6 knots

If choice A is selected set score to 1.

10. Which action should you take to compensate for the above current?

- (A) Alter your course to the right.
- (B) Alter your course to the left.
- (C) Slow to 8.5 knots.
- (D) Continue on the same course and speed.

If choice B is selected set score to 1.

11. At 0815, visibility is excellent and you can see Montauk Point. Montauk Point Light is _____.

- (A) is 79 feet (24 meters) high
- (B) equipped with a fog diaphone
- (C) shown from a brown tower
- (D) lighted 24 hours

If choice D is selected set score to 1.

12. At 0815, you change course to 079°T. To compensate for a southerly wind, you estimate a 3° leeway is necessary. Which course should you steer per standard magnetic compass to make good 079°T?

- (A) 095°psc
- (B) 090°psc
- (C) 093°psc
- (D) 099°psc

If choice D is selected set score to 1.

13. At 0839, Montauk Pt. Light is bearing 205°T at a radar distance of 6.6 miles. What is your speed made good from your 0815 position?

- (A) 10.0 knots
- (B) 10.5 knots
- (C) 8.2 knots
- (D) 9.2 knots

If choice D is selected set score to 1.

14. The area between Block Island and Montauk Point that is bounded by dashed magenta lines is a _____.

- (A) naval exercise area
- (B) fish trap area
- (C) restricted navigation area
- (D) submerged cable area

If choice D is selected set score to 1.

15. Which chart should you use to enter Great Salt Pond?

- (A) 13205
- (B) 13217
- (C) 13207
- (D) 13204

If choice B is selected set score to 1.