

U.S.C.G. Merchant Marine Exam
Mate of Unlimited Tonnage
Q311 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.

You are steering a westerly course and approaching Block Island Sound.
The variation for the area is 15°W.
The gyro error is 2°E.

DEVIATION TABLE

<u>Magnetic Heading</u>	<u>Deviation</u>
000°	0°
030°	1.0°W
060°	3.0°W
090°	2.0°W
120°	1.0°W
150°	0°
180°	0°
210°	1.0°E
240°	2.0°E
270°	1.5°E
300°	1.0°E
330°	0°

You are underway in the vicinity of Block Island and obtain the following lines of position:
Visual Bearing: Montauk Point Light 263°pgc
Visual Bearing: Block Island Southeast Light 026°pgc
Radar Bearing: Block Island Southwest Point 348°pgc

What is your position at the time of these sightings?

- (A) LAT 41°05.3'N, LONG 71°35.8'W
- (B) LAT 41°05.3'N, LONG 71°35.1'W
- (C) LAT 41°05.0'N, LONG 71°36.2'W
- (D) LAT 41°05.4'N, LONG 71°35.0'W

If choice A is selected set score to 1.

2. What course should you steer by your standard magnetic compass to make good a course of 280°T?

- (A) 266°psc
- (B) 294°psc
- (C) 272°psc
- (D) 290°psc

If choice B is selected set score to 1.

3. Which statement concerning Montauk Point Light is TRUE?

- (A) The height of the light is 24 feet.
- (B) The light comes on at sunset.
- (C) The tower is painted with black and white stripes.
- (D) There is an emergency light if the main light is extinguished.

If choice D is selected set score to 1.

4. At 1800, your position is LAT 41°06.5'N, LONG 71°43.5'W. How would the buoy which bears 030°T from your position at a range of approximately 0.5 mile be painted?

- (A) Solid green with red letters "BIS"
- (B) Vertically striped, red and green
- (C) Horizontally banded, green over red
- (D) Horizontally banded, red over green

If choice C is selected set score to 1.

5. From your 1800 position you steer a course of 350°psc at a speed of 10.0 knots. At 1830, your position is LAT 41°11.7'N, LONG 71°45.8'W. What are the set and drift of the current?

- (A) 029°T, 1.4 knot
- (B) 209°T, 1.4 knots
- (C) 209°T, 0.7 knot
- (D) 029°T, 0.7 knots

If choice A is selected set score to 1.

6. From your 1830 fix, you come left to a course of 290°T. Which of the following statements concerning Watch Hill Light is FALSE?

- (A) The nominal range of its white light is 15 miles.
- (B) Its horn blasts every 30 seconds in fog.
- (C) Its geographic range is 18.5 miles at a 35 foot (10.7 meter) height of eye.
- (D) It displays both red and white lights.

If choice C is selected set score to 1.

7. At 1850, you obtain the following bearings and distances:
Montauk Point 189° pgc @ 8.7 miles
Watch Hill Light 340° pgc @ 5.7 miles

What true course did you make good between 1830 and 1850?

- (A) 297° T
- (B) 305° T
- (C) 293° T
- (D) 299° T

If choice C is selected set score to 1.

8. If your height of eye is 35 feet (10.7 meters), what is the approximate geographic range of Block Island North Light?

- (A) 17.5 nm
- (B) 15.8 nm
- (C) 7.4 nm
- (D) 13.0 nm

If choice B is selected set score to 1.

9. What is the water depth at your 1850 position?

- (A) 120 feet
- (B) 142 feet
- (C) 135 feet
- (D) 105 feet

If choice A is selected set score to 1.

10. At 1915, you obtain the following bearings and distances:
Watch Hill Light 018° T @ 5.3 miles
Montauk Point Light 169° T @ 9.1 miles

What is your 1915 position?

- (A) LAT $41^{\circ}13.0'N$, LONG $71^{\circ}53.9'W$
- (B) LAT $41^{\circ}13.4'N$, LONG $71^{\circ}53.4'W$
- (C) LAT $41^{\circ}13.0'N$, LONG $71^{\circ}54.1'W$
- (D) LAT $41^{\circ}13.2'N$, LONG $71^{\circ}53.7'W$

If choice D is selected set score to 1.

11. If you were to head into Fishers Island Sound, which of the following charts would you switch to for better detail of Mystic and Mystic Harbor?

- (A) 13209
- (B) 13214
- (C) 13212
- (D) 13215

If choice B is selected set score to 1.

12. From your 1915 position, you come left and set a course for Gardiners Point. At 1930, your position is LAT $41^{\circ}12.7'N$, LONG $71^{\circ}56.8'W$. What type of bottom is charted at this position?

- (A) Blue mud, gray sand
- (B) Buried mussels, gritty shells
- (C) Bumpy muck with grainy surface
- (D) Blue mud, gritty shells

If choice A is selected set score to 1.

13. From your 1930 position, you plot a course to pass 0.5 mile due south of Race Rock Light. If your vessel's speed is 10.0 knots, the current's set and drift are $040^{\circ}T$ at 1.8 knots, and a north wind produces a 3° leeway, what true course should you steer to make good your desired course?

- (A) $280^{\circ}T$
- (B) $290^{\circ}T$
- (C) $295^{\circ}T$
- (D) $300^{\circ}T$

If choice A is selected set score to 1.

14. As an option to heading into Long Island Sound, you consider anchoring in the vicinity of the Gardiners Point Ruins at the north end of Gardiners Island. What is the minimum recommended distance from the ruins for fishing, trawling, or anchoring?

- (A) 300 yards (91 meters)
- (B) 0.5 mile
- (C) 0.8 mile
- (D) 1.0 mile

If choice A is selected set score to 1.

15. NOAA VHF-FM weather broadcasts from New London, CT are on _____.

- (A) 162.55 MHz
- (B) 162.25 MHz
- (C) 162.40 MHz
- (D) 162.30 MHz

If choice A is selected set score to 1.