

U.S.C.G. Merchant Marine Exam

Mate Less than 500-1600 Gross Registered Tons

Q140 Chart 12354TR

(Sample Examination)

Choose the best answer to the following Multiple-Choice Questions.

1. The following questions should be answered using Chart 12354TR, Long Island Sound - Eastern Part, and the supporting publications.

Your vessel has a draft of 12 feet (3.7 meters)

Your height of eye is 24 feet (7.3 meters)

Variation is 14°W

"Per standard magnetic compass" is abbreviated "psc"

"Per gyrocompass" is abbreviated "pgc"

DEVIATION TABLE

Magnetic

Heading Deviation

000°	0°
030°	1°W
060°	2°W
090°	4°W
120°	2°W
150°	1°W
180°	1°E
210°	2°E
240°	3°E
270°	3°E
300°	2°E
330°	1°E

Your position is LAT 40°59.0'N, LONG 73°06.2'W.

What is the course psc to New Haven Harbor Lighted Whistle Buoy "NH"?

- A. 049°
- B. 052°
- C. 035°
- D. 046°

Correct answer: B

2. You depart from the position in the previous question at 2114 and make good 12 knots on a course of 040°T. At what time will you sight New Haven Light if the visibility is 11 miles?

- A. 2159
- B. 2152
- C. 2206
- D. The light is visible at 2114.

Correct answer: A

3. At 2142, you take the following bearings:

Stratford Point Light 331°T
Stratford Shoal Middle Ground Light 280°T
Old Field Point Light 223°T

What is your 2142 position?

- A. LAT 41°03.1'N, LONG 73°01.3'W
- B. LAT 41°03.0'N, LONG 73°01.7'W
- C. LAT 41°02.7'N, LONG 73°01.2'W
- D. LAT 41°03.3'N, LONG 73°01.9'W

Correct answer: B

4. What was the speed made good between 2114 and 2142?

- A. 12.3 knots
- B. 11.7 knots
- C. 11.4 knots
- D. 12.0 knots

Correct answer: C

5. At 2142, you change course to make good 030°T and increase speed to 14 knots. You rendezvous with another vessel and receive fresh supplies while off New Haven Harbor lighted whistle buoy "NH". What is the light characteristic of this buoy?

- A. . .
- B. __
- C. _ .
- D. . _

Correct answer: D

6. At 0109 you get underway, and at 0112 you take the following bearings: Branford Reef Light bearing 051° true
Stratford Point Light bearing 258° true What is your 0112 position?

- A. LAT 41°11.0'N, LONG 72°51.0'W
- B. LAT 41°11.4'N, LONG 72°51.3'W
- C. LAT 41°11.6'N, LONG 72°51.6'W
- D. LAT 41°11.8'N, LONG 72°51.8'W

Correct answer: B

7. At 0112, what is the approximate depth under the keel?

- A. 51 feet (15.5 meters)
- B. 57 feet (17.3 meters)
- C. 38 feet (11.5 meters)
- D. 47 feet (14.2 meters)

Correct answer: C

8. At 0112, you are on course 124°T and turning for 12.0 knots. What course will you make good if the current is 255°T at 1.2 knots?

- A. 118°
- B. 132°
- C. 120°
- D. 129°

Correct answer: D

9. Branford Reef is _____.

- A. a hard sand shoal marked with a light
- B. surrounded by rocks awash at low water spring tides
- C. a small, low, sandy islet surrounded by shoal water
- D. completely submerged at all stages of the tide

Correct answer: D

10. At 0112, the radar range to Branford Reef Light is 2.9 miles. At 0125, the range is 3.6 miles. What is the position of your 0125 running fix if you are steering 124°T at 12 knots?

- A. LAT 41°09.7'N, LONG 72°48.1'W
- B. LAT 41°09.8'N, LONG 72°47.2'W
- C. LAT 41°10.2'N, LONG 72°47.7'W
- D. LAT 41°09.3'N, LONG 72°48.7'W

Correct answer: A

11. At 0130, your position is LAT 41°09.3'N, LONG 72°46.9'W when you change course to 086°T. If you make good 086°T, what is the closest point of approach to Twenty-Eight Foot Shoal Lighted Buoy?

- A. 1.2 mile
- B. 0.7 miles
- C. 1.1 mile
- D. 0.9 miles

Correct answer: D

12. At 0200, you take the following bearings:

Falkner Island Light 004.5°T
Kelsey Pt. Breakwater Lt. 054.0°T
Horton Point Light 115.0°T

What were the set and drift from 0130?

- A. There is no current.
- B. 080° at 0.5 knot
- C. 260° at 0.5 knot
- D. 260° at 1.0 knot

Correct answer: D

13. What is the distance from your 0200 position to the point where Twenty-Eight Foot Shoal lighted buoy is abeam to starboard?

- A. 6.6 miles
- B. 7.3 miles
- C. 7.1 miles
- D. 6.9 miles

Correct answer: D

14. The shoreline along Rocky Point should give a good radar return because _____.

- A. submerged reefs cause prominent breakers
- B. the lookout tower is marked with radar reflectors
- C. of offshore exposed rocks
- D. the shore is bluff and rocky

Correct answer: D

15. You sight Bartlett Reef Light in line with New London Harbor Light bearing 043° pgc. You are heading 088° pgc and 098.5° per standard magnetic compass at the time of the observation. Which statement is TRUE?

- A. The true heading at the observation was 090° .
- B. The deviation is 1.5° E by observation.
- C. The gyro error is 2° E.
- D. The magnetic compass error is 9.5° W.

Correct answer: B