

U.S.C.G. Merchant Marine Exam

Apprentice Mate Steersman

Q421 Chart 13205TR

(Sample Examination)

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

1. The Light List shows that a navigational light has a nominal range of 15 miles and a height above water of 40 feet (12.2 meters). Your height of eye is 25 feet (7.6 meters) and the visibility is 5 miles. At about what range will you FIRST sight the light?
- A. 6.2 miles
 - B. 9.5 miles
 - C. 12.9 miles
 - D. 14.2 miles

Correct answer: B

2. The following questions are to be answered using Chart 13205 TR, Block Island Sound, and supporting publications.

Your vessel is on a course of 090°T at a speed of 14 knots.

Your draft is 37 feet, and your height of eye is 56 feet.

At 1705:

Race Rock Light bears 099°True

Orient Point Light bears 176°True

Bartlett Reef Light bears 083°True

What is your vessel's position?

- A. LAT 41°16.4'N, LONG 72°14.2'W
- B. LAT 41°15.4'N, LONG 72°16.6'W
- C. LAT 41°15.9'N, LONG 72°14.0'W
- D. LAT 41°15.0'N, LONG 72°14.3'W

Correct answer: C

3. If there is no set or drift, at what time would you be abeam of Bartlett Reef Light?
- A. 1724
 - B. 1734
 - C. 1719
 - D. 1729

Correct answer: A

4. At 1718, Bartlett Reef Light bears 050°T at a distance of 1.5 miles. From this position, you change course to 128°T. At 1750 Race Rock Light bears 336°T, Little Gull Island Light bears 285°T, and Montauk Point Light bears 134°T. What were the set and drift of the current you encountered since 1718?
- A. 065°T at 1.7 knots
 - B. 245°T at 0.9 knots
 - C. 245°T at 1.7 knots
 - D. 065°T at 0.9 knots

Correct answer: A

5. If your fathometer is set on fathoms, what should your fathometer read at 1750?

- A. 51.0 fathoms
- B. 10.2 fathoms
- C. 8.5 fathoms
- D. 14.7 fathoms

Correct answer: C

6. At 1756 you determined your vessel's position to be $41^{\circ}10.4'N$, $71^{\circ}59.2'W$. From this position, you wish to change course to head for a point 5 miles west of Block Island North Light. With a reported set of $050^{\circ}T$, a drift of 2.0 knots and turning RPMs for 14 knots, which course should you steer to make good your desired course?

- A. $070^{\circ}T$
- B. $080^{\circ}T$
- C. $075^{\circ}T$
- D. $085^{\circ}T$

Correct answer: B

7. At 1844 Watch Hill Point bears $323^{\circ}T$ and Block Island North Light bears $084^{\circ}T$. Which statement is TRUE?

- A. Your vessel is approximately 8.7 miles off Sandy Point.
- B. You are to the left (north) of your desired course line.
- C. Your fathometer reads 97 feet
- D. You are governed by the Inland Rules of the Road.

Correct answer: A

8. From your 1850 position of $41^{\circ}12.8'N$, $71^{\circ}44.1'W$, you change course to $060^{\circ}T$. If you make the course good, what will be your predicted distance off Point Judith Light when the Light bears $015^{\circ}T$?

- A. 1.2 miles
- B. 1.9 miles
- C. 3.4 miles
- D. 2.7 miles

Correct answer: D

9. You are making good a course of $060^{\circ}T$ at a speed of 13.5 knots. At 1855 Block Island North Light bears $086^{\circ}T$; at 1910 Block Island North Light bears $108^{\circ}T$; and at 1930 the same light bears $184^{\circ}T$. Which statement is TRUE about your 1930 running fix position?

- A. The wavy magenta lines to the north through east of your position are designated lobstering areas.
- B. You are inside the 20-fathom curve
- C. The bottom is mud, sand, and clay.
- D. You are on the edge of a cable area.

Correct answer: D

10. At 1942 Point Judith bears 030°T and has a range of 3.6 miles and Sandy Point has a range of 5.3 miles.
What was your speed made good from your 1850 position?

- A. 14.0 knots
- B. 12.5 knots
- C. 13.5 knots
- D. 13.0 knots

Correct answer: D