

U.S.C.G. Merchant Marine Exam
Master Uninspected Fishing Vessels
Q184 Navigation Problems - Chart 12354TR
(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 22 miles and a height above water of 48 feet (14.6 meters). Your height of eye is 35 feet (10.7 meters) and the visibility is 20.0 miles. At what approximate range will you first sight the light?
- (A) 14.7 nm
 - (B) 32.0 nm
 - (C) 13.2 nm
 - (D) 10.5 nm

If choice A is selected set score to 1.

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

You are turning for 12.7 knots.
Your vessel's deep draft is 16 feet.
Gyro error is 2°W.
Use 14°W for variation where required.

DEVIATION TABLE

<u>Magnetic Heading</u>	<u>Deviation</u>
045°	3.0°E
060°	3.0°E
075°	1.5°E
090°	0.5°W

At 2127 you take the following round of bearings:
Old Field Point Light 224.0°pgc
Middle Ground Light 320.5°pgc
Stratford Point Light 348.0°pgc

Based on the above fix, which statement is TRUE?

- (A) At 2127, your fathometer reads about 17 fathoms.
- (B) You will experience a 1 knot westward setting ebb current
- (C) You are south of Mt. Misery Shoal.
- (D) You have lost sight of the red light at Old Field Point.

If choice A is selected set score to 1.

3. At 2127 you are on course 076°T. What is your ETA at a position where Twenty Eight Foot Shoal Lighted Bell Buoy "TE" is abeam to port?

- (A) 2345
- (B) 2316
- (C) 2324
- (D) 2332

If choice D is selected set score to 1.

4. At 2200 Middle Ground Light is bearing 270° true at 9nm.

Which statement is TRUE?

- (A) The drift is 0.6 knot.
- (B) The set is towards the southwest.
- (C) You are being set to the left of the track.
- (D) The vessel did not experience any set and drift.

If choice C is selected set score to 1.

5. You alter course to make good 076°T from your 2200 fix, and estimate you will make 13.6 knots over the ground. If the visibility is 5.5 miles, what is the earliest time you will sight Falkner Island Light? (nominal range 13 miles)

- (A) The light is visible at 2200
- (B) 2236
- (C) You will not sight the light
- (D) 2221

If choice B is selected set score to 1.

6. At 2214 you receive a "Securite" call requesting you to remain at least 2 miles away from underwater work taking place at LAT 41°07.8'N, LONG 72°34.6'W. If you change course at 2220 and allow 3° leeway for southerly winds which course will you steer per gyrocompass to comply with this request? No allowance made for current.

- (A) 083°pgc
- (B) 079°pgc
- (C) 086°pgc
- (D) 089°pgc

If choice D is selected set score to 1.

7. At 2236 Falkner Island Light bears 024° true at a range of 8.6nm.

What was the speed made good along the track line since your 2200 fix?

- (A) 13.9 knots
- (B) 12.7 knots
- (C) 14.2 knots
- (D) 13.5 knots

If choice D is selected set score to 1.

8. At 2310 your position is LAT $41^\circ 05.5'N$, LONG $72^\circ 33.7'W$ and you change course to make good $068^\circ T$. A radar speed check using Twenty Eight Foot Shoal Buoy indicates your speed over the ground is 13.6 knots. At 2325 Horton Point Light bears $129^\circ T$. At 2341 the same light bears $194^\circ T$. What is the position of your 2341 running fix?

- (A) LAT $41^\circ 08.8'N$, LONG $72^\circ 25.2'W$
- (B) LAT $41^\circ 07.9'N$, LONG $72^\circ 25.9'W$
- (C) LAT $41^\circ 08.3'N$, LONG $72^\circ 25.8'W$
- (D) LAT $41^\circ 08.5'N$, LONG $72^\circ 25.6'W$

If choice D is selected set score to 1.

9. At 2342 the gyro alarm sounds and you commence steering by standard magnetic compass. If you allow 3° leeway for southerly winds and do not correct for any existing current, what is the course to steer by standard magnetic compass to make good $068^\circ T$?

- (A) 084.5°
- (B) 081.0°
- (C) 054.0°
- (D) 079.5°

If choice A is selected set score to 1.

10. At 2350 the gyro is restored to service. At 0016 the visibility improves. At 0028 you sight Bartlett Reef Light in line with New London Harbor Light bearing 039° pgc. What is the gyro error?

- (A) $2^\circ E$
- (B) $4^\circ W$
- (C) $2^\circ W$
- (D) 0°

If choice A is selected set score to 1.