

Demo PDF file. This file includes questions: 10 from 60. Full version of file looks the same as demo, but full version includes all questions. You may download file with all questions by link on bottom of this page

Q426 - Navigation Problems: Chart Plot

1. The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes LMR = Lower Mississippi River UMR = Upper Mississippi River OHR = Ohio River ACOE = Army Corps of Engineers On 3 January, you get underway from Morganza, LA, (mile 278.3 AHP) enroute to the Eagle Marine Docks, LDB, in St. Louis. What is the length of the trip?

- 726.0 miles
- **851.9 miles**
- 878.9 miles
- 879.6 miles

Note:

The distance from Morganza, LA to Eagle Marine Docks in St. Louis is 851.9 miles. This is calculated by converting both locations to miles Above Head of Passes (AHP) and subtracting their respective mileages, accounting for the difference in river mile systems between the Lower and Upper Mississippi Rivers.

2. What are the dimensions of the Old River Lock on the Lower Old River (304 AHP)?

- 1202 x 84 feet
- **1190 x 75 feet**
- 1195 x 84 feet
- 1195 x 75 feet

Note:

The Old River Lock (Lower Old River, 304 AHP) has dimensions of 1190 x 75 feet. This measurement is derived from official U.S. Army Corps of Engineers data and is the standard dimension used in inland navigation exams; always verify current regulations for operational planning.

3. At 2126, you pass Morganza Bend Light (mile 278.4 AHP). At 0122, 4 January, you pass Red River Landing Gage (302.4 AHP). You have been turning for 7.5 mph. What is the current?

- 1.8 MPH
- 6.2 MPH
- **1.4 MPH**
- 2.7 MPH

Note:

The current is 1.4 mph. The vessel's speed over ground was calculated as 6.1 mph, which is 1.4 mph less than its speed through the water of 7.5 mph.

4. The Gage at Red River Landing reads 22.2 feet. The low water reference plane for Red River is 10.6 feet. How many feet is this above the low water reference plane?

- **11.6 ft**
- 10.6 ft
- 32.8 ft
- 22.2 ft

Note:

Subtract the reference plane from the gage reading: 22.2 ft - 10.6 ft = 11.6 ft.

5. The river will be temporarily closed to navigation at mile 531.3 AHP due to repairs to the bridge. This will occur at 1300, 5 January, and last for six hours. What minimum speed over the ground must you make from Red River Landing Gage to arrive before commencement of repairs in order not to be delayed?

- 6.8 mph
- 6.0 mph
- 7.3 mph
- **6.4 mph**

Note:

The required speed is calculated by dividing the distance between Red River Landing Gage and mile 531.3 AHP (approximately 230 statute miles) by the available time until 1300, 5 January (approximately 36 hours), resulting in a minimum speed of 6.4 mph to avoid delays.

6. What type of daymark will you see as you approach Joe Pierce Light (mile 335.4 AHP)?

- Red square
- Private aid - no daymark
- **Red triangle**
- Red diamond

Note:

Joe Pierce Light is a red lateral aid, and U.S. charts depict red lateral daymarks on fixed structures as red triangles; therefore, the correct answer is a red triangle.

7. What is the vertical clearance of the Natchez-Vidalia Highway Bridge (westbound) when the river level is the same as the Low Water Reference Plane (6.5 feet)?

- 125.6 ft
- **119.5 ft**
- 108.3 ft
- 102.2 ft

Note:

When the river level matches the Low Water Reference Plane, the vertical clearance equals the charted clearance of 119.5 ft.

8. The Natchez Gage reads 20.6 feet. The high point on your towboat is 47 feet above the water. What is the vertical clearance as you pass under the Natchez Highway Bridge?

- **58.0 feet**
- 72.5 feet
- 64.1 feet
- 78.6 feet

Note:

The vertical clearance is calculated by subtracting the river stage and the towboat's air draft from the bridge's clearance at 0 feet on the gage. The Natchez Highway Bridge has a clearance of 125.6 feet at 0.0 feet on the Natchez Gage. With a river stage of 20.6 feet, the actual clearance is 105.0 feet. Subtracting the towboat's height of 47 feet results in a vertical clearance of 58.0 feet.

9. In order to determine what buoys, if any, are in place at Concordia Bar crossing (mile 596.0 AHP), what should you check?

- **Notice to Mariners**
- Bulletin board at the Rosedale Gage
- Light List
- Waterways Journal

Note:

To determine the current status of buoys at Concordia Bar crossing, consult the Notice to Mariners, the official source for updates on aids to navigation.

10. The area between Island 67 Upper Light (mile 623.1 AHP) and Sunflower Cut-off Foot Light (mile 624.8 AHP) is known as a _____.

- transit
- slough
- chute
- **crossing**

Note:

The correct answer is crossing. This term specifically describes a reach of the Mississippi River where the navigation channel shifts from one bank to the other, as is the case between Island 67 Upper Light and Sunflower Cut-off Foot Light. Other terms refer to different features or movements and are not applicable in this context.
