
Q425 - Navigation General: Western Rivers

1. A magnetic compass card is marked in how many degrees?

- 90
- 180
- **360**
- 400

Note:
A magnetic compass card represents a full circle, which is measured in 360 degrees. Therefore, the correct answer is 360.

---

2. As a vessel changes course to starboard, which is TRUE concerning the compass card in a magnetic compass?

- The card also turns to starboard
- It first turns to starboard then counterclockwise to port
- The card turns counterclockwise to port
- **The card remains aligned with compass north**

Note:
The magnetic compass card remains aligned with magnetic north as the vessel changes course; the ship rotates around the card.

---

3. What does the lubber's line on a magnetic compass indicate?

- **The vessel's compass heading**
- Compass north
- Magnetic north
- A relative bearing taken with an azimuth circle

Note:
The lubber's line is a fixed reference mark on a magnetic compass that indicates the vessel's compass heading, aligning with the ship's centerline and showing the direction the bow is pointing on the compass card.

---

4. Which would influence a magnetic compass?

- Radio
- Iron pipe
- Electrical wiring
- **All of the above**

Note:
Radio equipment, iron pipes, and electrical wiring all generate or interact with magnetic fields, which can disrupt a magnetic compass; therefore, all listed items influence a compass.

---

5. When is a lookout permitted to leave his station?

- 15 minutes before the end of the watch
- **Only when properly relieved**
- At the end of the watch
- At any time

Note:
A lookout may only leave their station when properly relieved to ensure continuous watch coverage as mandated by Navigation Rules Rule 5, which requires a proper lookout at all times.

---

6. When must a proper look-out be kept?

- Only when entering and leaving port
- Only in fog
- Only between the hours of sunset and sunrise
- **At all times**

Note:
Rule 5 of the Navigation Rules mandates a proper look-out be kept at all times, regardless of visibility or location.

---

7. What does the abbreviation L.W.R.P. on the navigation maps mean?

- Least water river plane
- Low winter runoff point
- **Low water reference plane**
- Land wall reference point

Note:
L.W.R.P. on navigation charts represents the Low Water Reference Plane, a fixed vertical datum used to measure water depths and clearances. This datum is not related to seasonal conditions, physical structures, or river hydrology; it serves as a baseline for chart measurements.

---

8. According to Buys Ballot's law, when an observer in the Northern Hemisphere experiences a northwest wind, where is the center of low pressure located?

- **Northeast of the observer**
- Northwest of the observer
- South-southeast of the observer
- West-southwest of the observer

Note:
According to Buys Ballot's law in the Northern Hemisphere, a northwest wind indicates the low-pressure center is located northeast of the observer; this is because facing the wind's direction (southeast) places the low-pressure center to the observer's left.

---

9. Which action should be taken prior to assuming the Deck Watch while the vessel is in port?

- **Ensure that the vessel's moorings are adequate**
- Make a security call on VHF channel 16
- Visually inspect and test operation of the blue mooring light
- Ensure that all crew members are onboard

Note:
The primary responsibility before assuming the deck watch in port is to verify the adequacy of the vessel's moorings to ensure its safety and security alongside.

---

10. What is an advantage of the magnetic compass aboard vessels?

- **It is reliable due to its essential simplicity.**
- All points on the compass rose are readily visible.
- Compass error is negligible at or near the earth's magnetic poles.
- It does not have to be checked as often.

Note:
A magnetic compass's reliability stems from its simple mechanical design, minimizing potential points of failure.
