

Demo PDF file. This file includes questions: 10 from 1422. 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

Q371 - Navigation General

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. The heading of a vessel is indicated by what part of the compass?

- Needle
- Card
- **Lubber's line**
- Gimbals

Note:

The heading is determined by the alignment of the compass card with the fixed lubber's line, which is aligned with the vessel's fore-and-aft line. The lubber's line serves as a fixed reference point, while the compass card rotates to indicate direction; the needle or sensing element aligns the card, and the gimbals maintain the compass's level.

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. A vessel heading NNW is on a course of _____.

- 274.5°
- 292.0°
- 315.5°
- 337.5°

Note:

A vessel heading NNW has a course of 337.5. This is because NNW lies 22.5 west of true north on a standard 16-point compass rose, calculated as 360 - 22.5.

6. A vessel heading NE is on which course?

- 022.5°
- 045.0°
- 067.5°
- 090.0°

Note:

Northeast corresponds to a course of 045.0 because it lies exactly halfway between North (000) and East (090) on a 360 compass.

7. A vessel heading WSW is on a course of _____.

- 202.5°
- 225.0°
- 247.5°
- 271.0°

Note:

WSW lies between southwest (225) and west (270), resulting in a true bearing of 247.5.

8. A vessel heading SSE is on a course of _____.

- 112.5°
- 135.0°
- 157.5°
- 180.0°

Note:

SSE lies between SE (135.0) and S (180.0), resulting in a course of 157.5.

9. Apparent wind speed blowing across a MODU under tow can be measured by a(n) _____.

- anemometer
- wind vane
- thermometer
- barometer

Note:

An anemometer measures wind speed, including apparent wind speed on a MODU under tow. Other instruments measure wind direction, temperature, or atmospheric pressure, respectively, and are therefore incorrect.

10. What is the function of the "rudder adjustment" control on an autopilot steering stand?

- To set the departure from base course before actuating the rudder
- To align the rudder angle indicator with the true rudder angle
- To set the rate at which the rudder responds
- **To set the number of degrees of rudder per degree of course error**

Note:

The rudder adjustment control on an autopilot determines the rudder response to course error, specifically setting the degrees of rudder applied per degree of error. This control establishes the system's steering gain, influencing the speed and stability of course corrections; other controls manage response rate or indicator alignment, and options A, B, and C describe unrelated functions.
