

U.S.C.G. Merchant Marine Exam

Able Seaman Unlimited, Limited, Special,
Special OSV, Sail, Fishing Industry

Q450 Navigation General – Rules of the Road
(Sample Examination)

Note: The only allowable reference for this exam is The American Practical Navigator - Bowditch, Volume II, any copyright date except for 2002.

1. BOTH INTERNATIONAL & INLAND Which signal, other than a distress signal, can be used by a vessel to attract attention?
- A. Flames from a burning barrel
 - B. Orange smoke signal
 - C. Continuous sounding of a fog signal apparatus
 - D. Searchlight beam

Correct answer: D

2. When entering a channel from seaward, which is TRUE concerning the numbers on buoys?
- A. The numbers increase with the even numbers to starboard
 - B. The numbers are the same as their Light List number
 - C. The numbers decrease with the odd numbers to starboard
 - D. They are marked in 6 inch figures with retro-reflective material

Correct answer: A

3. How should a look-out, in the merchant service, report sightings?
- A. Magnetic bearings
 - B. True bearings
 - C. Relative bearings
 - D. Gyro bearings

Correct answer: C

4. You are sailing south on the Intracoastal Waterway (ICW) when you sight a red nun buoy with a yellow square painted on it. Which of the following is TRUE?
- A. The yellow square is in error and it should be a yellow triangle.
 - B. This buoy marks the end of the ICW in that geographic area.
 - C. You should leave the buoy on your port hand.
 - D. The yellow is retro-reflective material used to assist in sighting the buoy at night.

Correct answer: C

5. INLAND ONLY Which statement is TRUE concerning lighting requirements for Great Lakes vessels?
- A. The showing of a forward masthead light is optional for vessels under 150 meters.
 - B. An all-round white light may be carried in lieu of the second masthead light and stern light.
 - C. Great Lakes vessels are exempted from the requirement to show yellow towing lights.
 - D. Sidelights for vessels over 50 meters are required to have only a two-mile range of visibility.

Correct answer: B

6. INLAND ONLY A vessel leaving a dock or berth must sound a prolonged blast of the whistle only if _____.

- A. visibility is restricted
- B. other vessels can be seen approaching
- C. her engines are going astern
- D. she is a power-driven vessel

Correct answer: D

7. BOTH INTERNATIONAL & INLAND Which vessel must show a towing light above the stern light?

- A. A vessel towing alongside
- B. A vessel with a 150-meter tow astern
- C. A vessel pushing three barges ahead
- D. None of the above

Correct answer: B

8. BOTH INTERNATIONAL & INLAND Which is TRUE for a fishing vessel displaying the lights shown in illustration D067RR below?

- A. the vessel is fishing by trawling
- B. it is underway but not fishing
- C. it is tending a small fishing boat
- D. the vessel is anchored

Correct answer: A

9. BOTH INTERNATIONAL & INLAND When navigating in thick fog with the radar on, which action should you take?

- A. Secure the sounding of fog signals until a vessel closes within five miles
- B. Station the look-out in the wheelhouse to keep a continuous watch on the radar
- C. Keep the radar on the shortest available range for early detection of approaching vessels
- D. Station a look-out as low down and far forward as possible

Correct answer: D

10. BOTH INTERNATIONAL & INLAND A vessel aground in fog shall sound, in addition to the proper anchor signal, which of the following?

- A. Three strokes on the bell before and after the anchor signal
- B. One prolonged and one short blast on the whistle
- C. Three strokes on the gong before and after sounding the anchor signal
- D. Four short blasts on the whistle

Correct answer: A

11. Which is TRUE concerning magnetic compass deviation?

- A. It is the angular difference between magnetic north and compass north
- B. It is published on the compass rose on most nautical charts
- C. It varies depending upon the bearing used
- D. It is the angular difference between geographic and magnetic meridians

Correct answer: A

12. A vessel heading ENE is on which course?

- A. 022.5°
- B. 045.0°
- C. 067.5°
- D. 090.0°

Correct answer: C

13. BOTH INTERNATIONAL & INLAND For the purpose of the Rules, except where otherwise required, the term _____.

- A. "vessel engaged in fishing" includes a vessel fishing with trolling lines
- B. "vessel" includes seaplanes
- C. "vessel restricted in her ability to maneuver" includes fishing vessels
- D. "seaplane" includes non-displacement craft

Correct answer: B

14. BOTH INTERNATIONAL & INLAND While underway you sight a vessel displaying the shapes shown in illustration D006RR below. What action should you take?

- A. provide assistance, the other vessel is in distress
- B. stay clear, the other vessel cannot get out of the way
- C. contact the vessel on VHF radiotelephone
- D. stop your vessel and sound passing signals

Correct answer: B

15. You sight a buoy fitted with a double-sphere topmark. If sighted at night, what color and light sequence would you expect to see?

- A. A quick-flashing red light
- B. A flashing white light showing a group of two flashes
- C. A flashing red light showing a group of three flashes
- D. A quick-flashing green light

Correct answer: B

16. INLAND ONLY A barge more than 50 meters long is required to show how many white anchor lights when anchored in a Secretary approved "special anchorage area"?

- A. 2
- B. 1
- C. 3
- D. None

Correct answer: A

17. Which term is used to express the maximum distance at which a light may be seen under existing visibility conditions?

- A. Nominal range
- B. Luminous range
- C. Charted range
- D. Geographic range

Correct answer: B

18. What does a white buoy with an orange cross within a diamond marked on it indicate?

- A. Vessels are excluded from the area
- B. Operating restrictions are in effect
- C. Danger
- D. An anchorage area

Correct answer: A

19. BOTH INTERNATIONAL & INLAND A vessel is being propelled both by sail and by engines. Under the Rules, the vessel is in which category?

- A. The vessel is not covered under any category
- B. A "special circumstance" vessel
- C. A sail vessel
- D. A power-driven vessel

Correct answer: D

20. Under the IALA cardinal system, a mark with quick white light showing 3 flashes every 10 seconds indicates that the safest water in the area is in which location?

- A. The south side of the mark
- B. The west side of the mark
- C. The north side of the mark
- D. The east side of the mark

Correct answer: D

21. BOTH INTERNATIONAL & INLAND At night you sight a vessel displaying one green light. What is indicated by this light configuration?

- A. small motorboat underway
- B. vessel drifting
- C. sailboat underway
- D. vessel at anchor

Correct answer: C

22. A vessel heading NE is on which course?

- A. 022.5°
- B. 045.0°
- C. 067.5°
- D. 090.0°

Correct answer: B

23. INLAND ONLY A vessel engaged in public safety activities may display an alternately flashing red and yellow light. This special light may be used by a vessel engaged in which of the following?

- A. river bank protection
- B. law enforcement
- C. submarine operations
- D. firefighting

Correct answer: D

24. What does the helm command "meet her" mean?

- A. Note the course and steady on that heading
- B. Decrease the rudder angle
- C. Use rudder to check the swing
- D. Steer more carefully

Correct answer: C

25. What daymark shape is used in the lateral system?

- A. Diamond
- B. Semicircle
- C. Pentagon
- D. Triangle

Correct answer: D

26. BOTH INTERNATIONAL & INLAND Which type of vessel is required to display the lights shown in illustration D070RR below?

- A. pilot boat
- B. sailboat
- C. motorboat
- D. fishing vessel

Correct answer: D

27. BOTH INTERNATIONAL & INLAND At night a vessel displaying the lights shown in illustration D065RR is doing which of the following?

- A. anchored
- B. being towed
- C. fishing
- D. drifting

Correct answer: A

28. BOTH INTERNATIONAL & INLAND In a crossing situation of two power-driven vessels, the vessel which has the other on her own starboard side shall take which action?

- A. reduce her speed
- B. change course to port to keep out of the way
- C. if the circumstances of the case admit, avoid crossing ahead of the other
- D. All of the above

Correct answer: C

29. Which buoy may be odd numbered?

- A. A red buoy
- B. A spherical buoy
- C. A yellow buoy
- D. An unlighted can buoy

Correct answer: D

30. BOTH INTERNATIONAL & INLAND When shall a proper look-out be maintained?

- A. at all times
- B. at night and during restricted visibility
- C. only at night
- D. only during restricted visibility

Correct answer: A

31. When outbound from a U.S. port, what does a buoy displaying a flashing red light indicate?

- A. A wreck to be left on the vessel's starboard side
- B. A junction with the preferred channel to the left
- C. The port side of the channel
- D. A sharp turn in the channel to the right

Correct answer: C

32. Deviation in a compass is caused by which of the following?

- A. The vessel's heading
- B. The vessel's geographic position
- C. The earth's magnetic field
- D. The influence of the magnetic materials of the vessel

Correct answer: D

33. Which buoy may be odd numbered?

- A. Lighted green buoy
- B. Mid-channel buoy
- C. Unlighted nun buoy
- D. All of the above

Correct answer: A

34. Which navigational mark may only be lettered?

- A. A port side day-shape
- B. An unlighted, green, can buoy
- C. A red buoy
- D. A spherical buoy

Correct answer: D

35. As you enter a U.S. channel from seaward, which is TRUE concerning the numbers on the buoys?

- A. increase with the can buoys being odd numbered
- B. increase in channels going to the north or west, and decrease in channels going to the south or east
- C. decrease with the can buoys being even numbered
- D. increase with the can buoys being even numbered

Correct answer: A

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

- A. Only when properly relieved
- B. 15 minutes before the end of the watch
- C. At the end of the watch
- D. At any time

Correct answer: A

37. BOTH INTERNATIONAL & INLAND Which of the signals, other than a distress signal, can be used by a vessel to attract attention?

- A. A burning barrel
- B. A red star shell
- C. The vessel's searchlight
- D. An orange smoke signal

Correct answer: C

38. You sight a spar buoy with the topmark shown in illustration D027NG below. You must take which of the following actions?

- A. Pass to the east of the buoy
- B. Pass to the south of the buoy
- C. Pass to the north of the buoy
- D. Keep well clear of the buoy and pass on either side

Correct answer: D

39. BOTH INTERNATIONAL & INLAND Which signal should be used to indicate that your vessel is in distress?

- A. Sounding four or more short rapid blasts on the whistle
- B. Continuously sounding the fog whistle
- C. Displaying a large red flag
- D. Displaying three black balls in a vertical line

Correct answer: B

40. While standing look-out at night, which is the BEST way to see a dim light on the horizon?

- A. Look a little below the horizon
- B. Look quickly above then quickly below the horizon
- C. Look a little above the horizon
- D. Look directly towards the light

Correct answer: C

41. INLAND ONLY You are overtaking another power-driven vessel in a narrow channel. The other vessel will have to move to allow you to pass. You wish to overtake the other vessel on her starboard side. What should be your first whistle signal?

- A. one short blast
- B. two prolonged blasts followed by one short blast
- C. two prolonged blasts followed by two short blasts
- D. two short blasts

Correct answer: A

42. BOTH INTERNATIONAL & INLAND Two power-driven vessels are crossing as shown in illustration D042RR below. Vessel "A" sounds three short blasts on the whistle. What is the meaning of this signal?

- A. Vessel "A" is sounding a signal of doubt
- B. Vessel "A" is backing engines
- C. Vessel "A" intends to hold course and speed
- D. Vessel "A" proposes to cross ahead of the other vessel

Correct answer: B

43. BOTH INTERNATIONAL & INLAND If two sailing vessels are running free with the wind on the same side, which one must keep clear of the other?

- A. The one to leeward
- B. The one to windward
- C. The one with the wind closest astern
- D. The one with the wind closest abeam

Correct answer: B

44. Which is a characteristic of a port side daymark?

- A. Black and white
- B. Numbered
- C. Of any shape
- D. Octagonal

Correct answer: B

45. What is a CORRECT reply to a pilot's request, "How's your head"?

- A. "Passing 50°"
- B. "Eased to 10° rudder"
- C. "Steady"
- D. "Checked"

Correct answer: A

46. Buoys which mark dredging areas are painted which color?

- A. Yellow
- B. Green
- C. Black
- D. Red

Correct answer: A

47. Some lights used as aids to marine navigation have a red sector to indicate a danger area. How are the limits of a colored sector of light listed in the Light List?

- A. True bearings as observed from a vessel toward the light
- B. Geographical positions outlining the area of the sector
- C. True bearings as observed from the light toward a vessel
- D. Bearings given in the Light List are always magnetic

Correct answer: A

48. BOTH INTERNATIONAL & INLAND When may a pilot vessel continue to sound an identity signal in fog?

- A. When not under command
- B. When aground
- C. When at anchor
- D. When no longer on pilotage duty

Correct answer: C

49. Under the U.S. Aids to Navigation System, what does a lighted buoy with a spherical topmark mark indicate?

- A. A hazard to navigation
- B. The port side of the channel
- C. The position of underwater cables
- D. Safe water

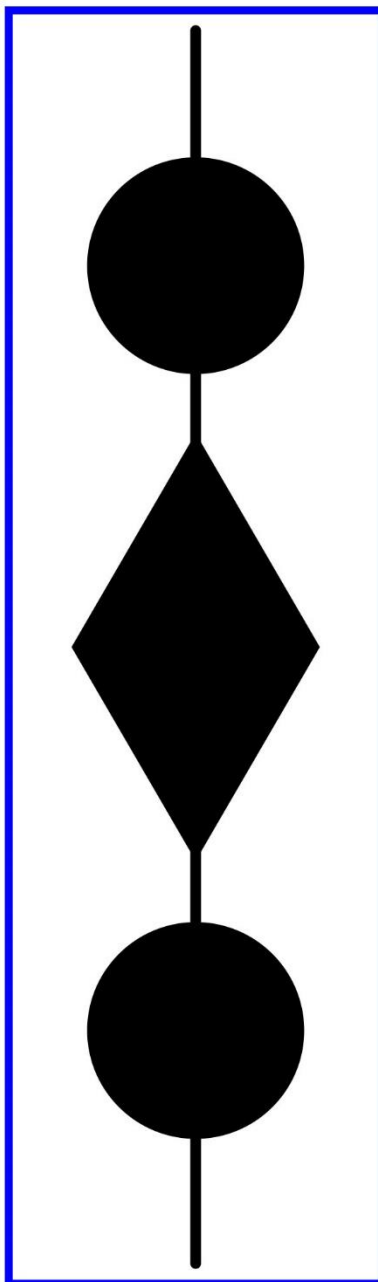
Correct answer: D

50. What is a characteristic of cardinal marks?

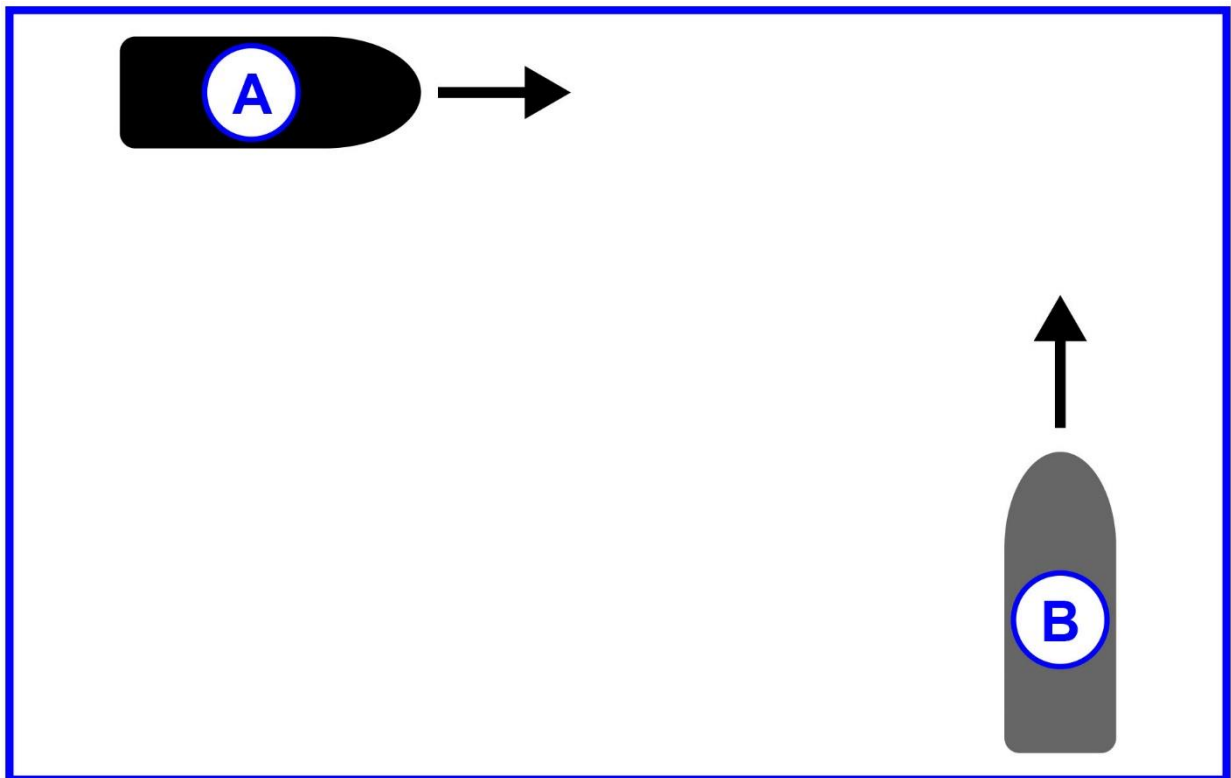
- A. Vertical stripes
- B. Number-letter combinations for identification
- C. Light rhythms indicating directional orientation
- D. Square or triangular topmarks

Correct answer: C

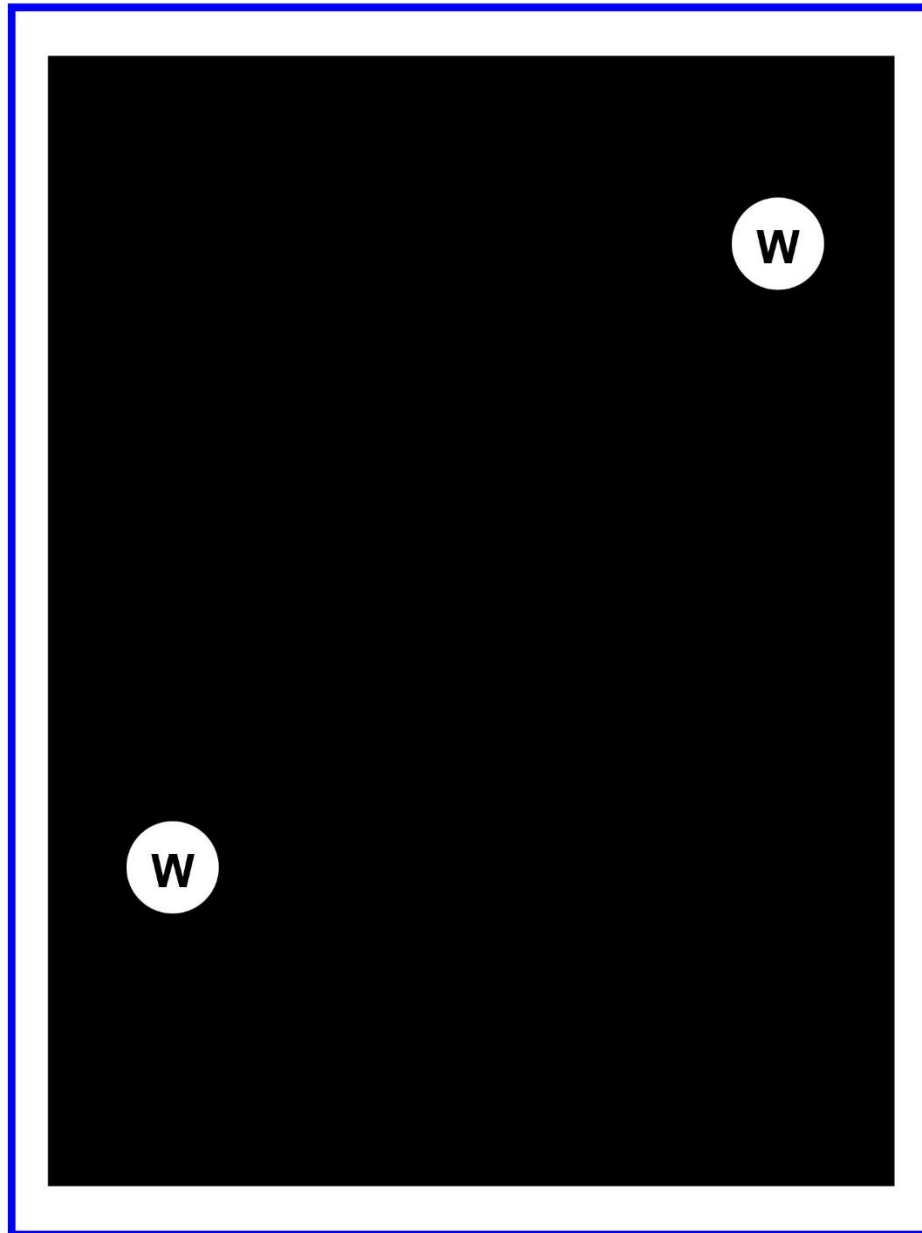
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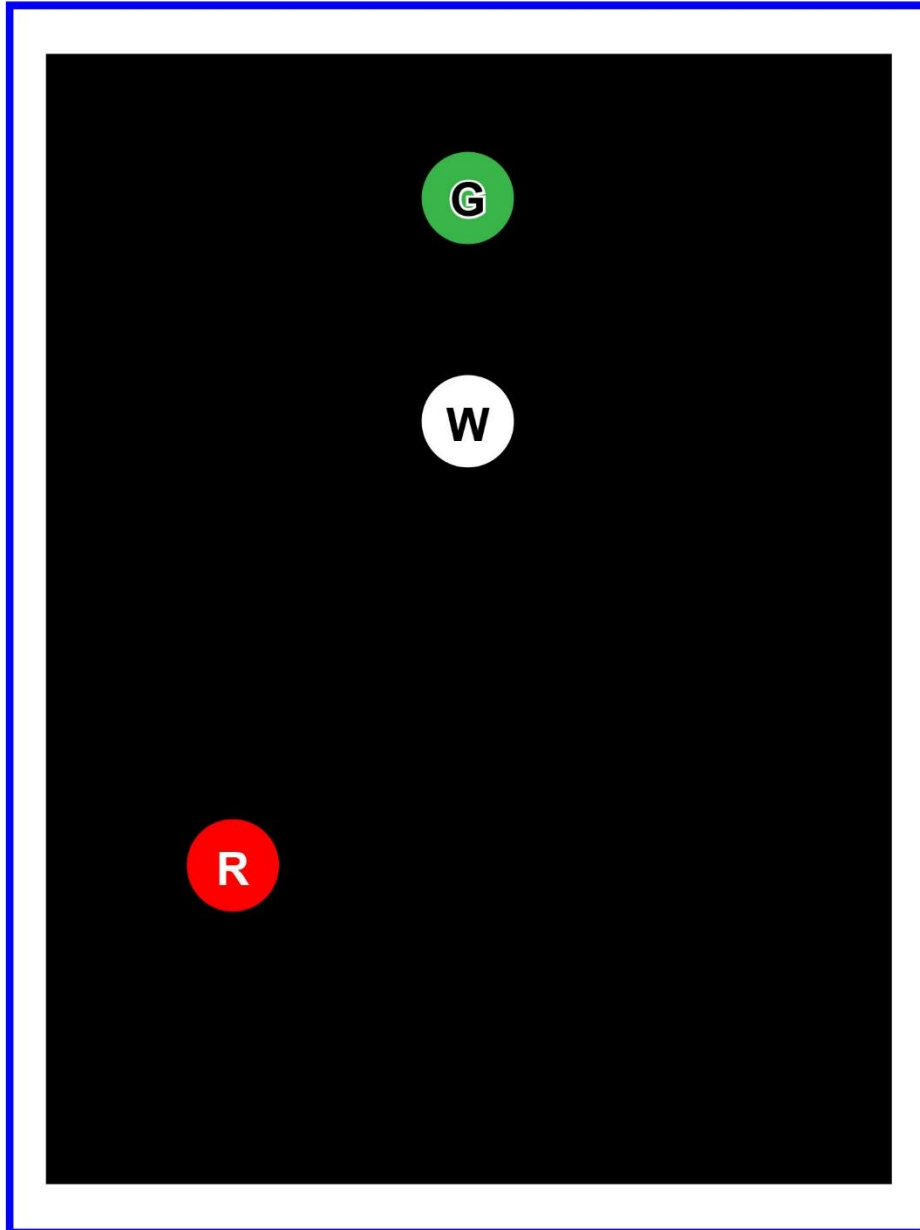


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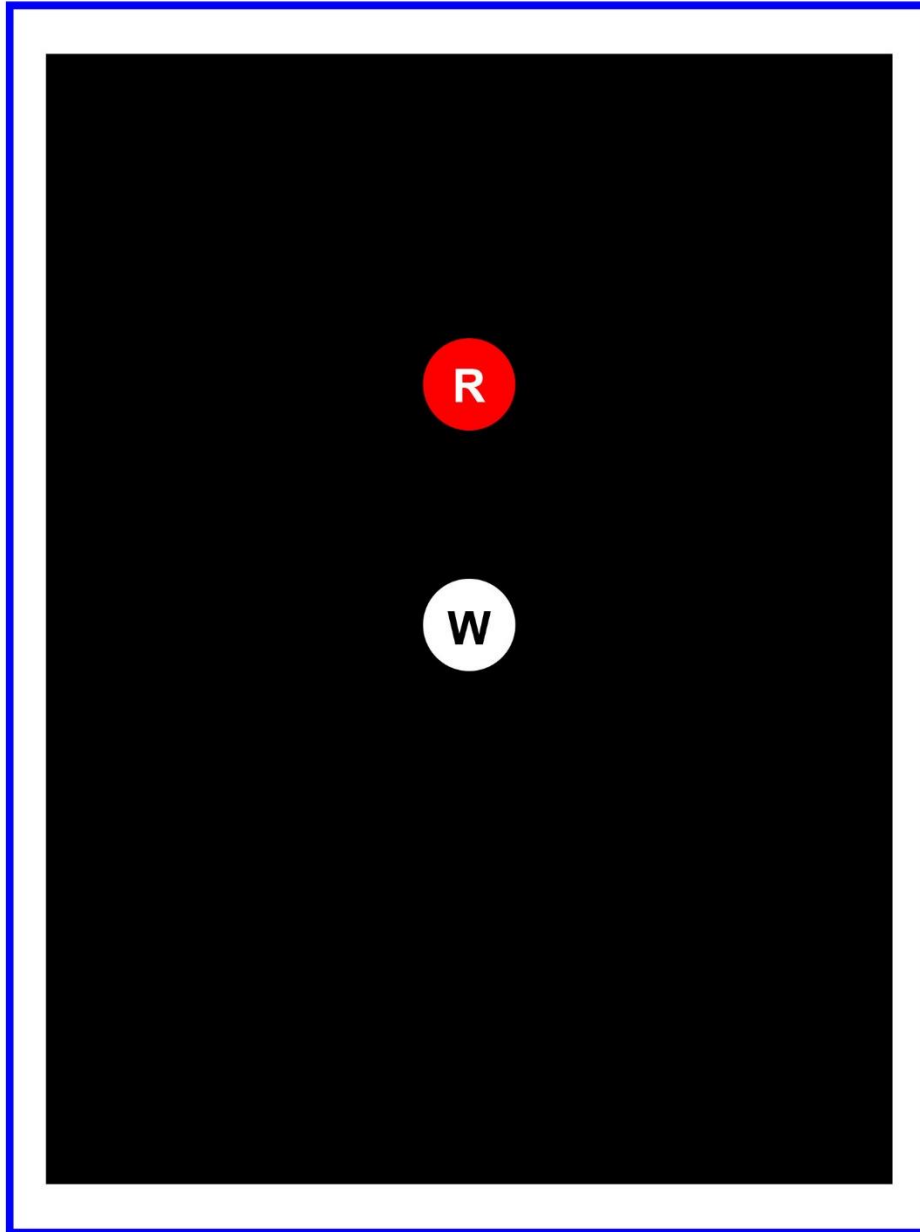


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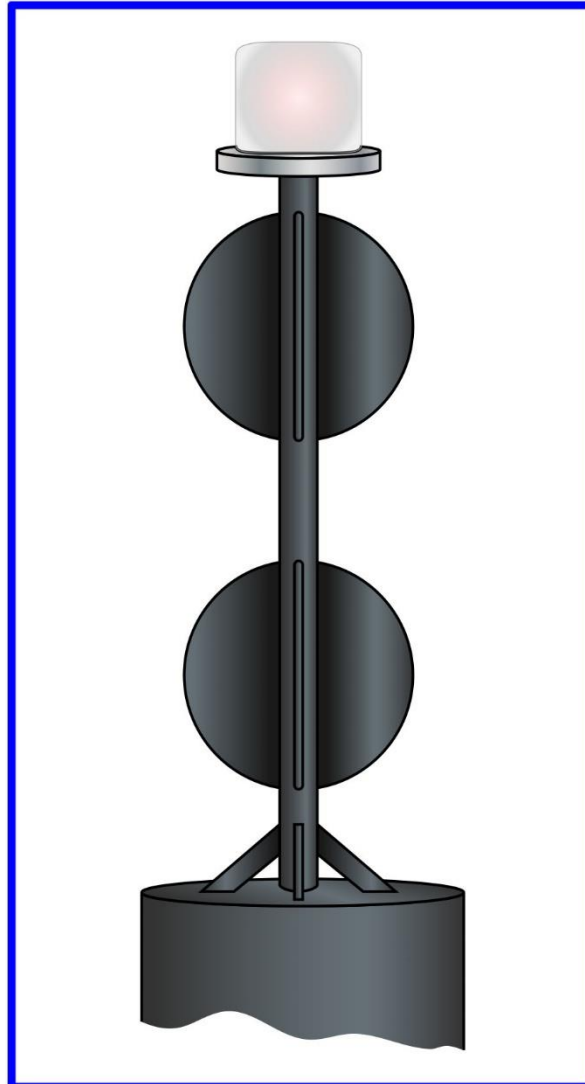
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D027NG



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