

# NAVIGATION

## Final Exam | A | English-Imperial

Instructions: Select the best answer from the choices below.  
Mark your answer on an SSI 50-Question Answer Form.

- 1. Which condition can cause problems for navigating from a shore entry point?**
  - A. Calm water
  - B. A localized current
  - C. Warm water
  - D. All answers are correct
- 2. What is the most common error made by divers using compasses?**
  - A. Diving too deep
  - B. Deviating through wrecks
  - C. Using the wrong compass
  - D. Improper body position
- 3. If you are swimming upslope or into shallower water, you are probably swimming:**
  - A. Toward the boat
  - B. Away from shore
  - C. Parallel to the beach
  - D. Toward the shore
- 4. To make an exact square navigation pattern, you must keep track of:**
  - A. How deep you swim at the first leg
  - B. How long it takes you to swim the first leg of the square
  - C. Depth, time and gas consumption
  - D. Light rays, 120-degree markings and depth
- 5. Just as the waves create ripples in the sand, other movements in the water can help you determine:**
  - A. Depth
  - B. Direction
  - C. Temperature
  - D. Speed
- 6. When a metal object comes in close proximity to the compass:**
  - A. Nothing will happen
  - B. Electrolysis is created
  - C. The magnetic needle will freeze at south
  - D. The compass will deviate
- 7. Determine the appropriate size of each section of a search area by evaluating the:**
  - A. Visibility, terrain, and how closely you plan on exploring
  - B. Depth and temperature
  - C. Size of your cylinder and the speed you are able to swim
  - D. No answer is correct
- 8. As you hold the compass it must be level both front-to-back, and:**
  - A. Top-to-bottom
  - B. Side-to-side
  - C. North-to-south
  - D. East-to-west
- 9. To navigate a square course, simply make:**
  - A. Two 180-degree turns
  - B. One and a half 240-degree turns
  - C. Four 90-degree turns
  - D. Three 120-degree turns
- 10. The basic components of a compass are:**
  - A. Magnetic needle, 360-degree markings, liquid-filled housing and a lubber line
  - B. Magnetic needle, 180-degree markings, gas-filled rubber housing
  - C. Magnetic needle, 90-degree markings, liquid-filled housing and a lubber line
  - D. Plastic needle, 180-degree markings, argon-filled housing and a lubber line
- 11. Which factors are required to calculate a current deviation correction?**
  - A. Your swimming speed and depth
  - B. Speed of the current, distance to your destination, and your swimming speed
  - C. Your compass settings and your distance to your destination
  - D. Boat speed, compass setting, and depth
- 12. When you are diving in low visibility, your instruments may provide your only sense of:**
  - A. Colors
  - B. Depth and direction
  - C. Distance from your buddy
  - D. Distance from the Dive Guide
- 13. If you are completely lost, but have sufficient breathing gas, the best thing to do is:**
  - A. Surface after doing a safety stop, take a compass heading, and drop below the surface to swim back
  - B. Surface and swim back on the surface
  - C. Take a compass heading at the safety stop, and descend to the bottom to swim back
  - D. Make a safety stop and guess where the exit is, then swim back without ascending
- 14. Any three angles can be used to calculate a three-sided navigation course if they total:**
  - A. 180 degrees
  - B. 360 degrees
  - C. 240 degrees
  - D. 120 degrees

- 15. The most important reason to use a compass is to maintain:**
- Depth
  - Time
  - Distance from your buddy
  - Direction
- 16. If you want extra confidence on your dive, use your compass:**
- With caution
  - In combination with natural navigation
  - In combination with air-integrated dive computers only
  - Only if there is no Dive Guide
- 17. What should you do with your compass before your first dive?**
- Try it several times in the pool/ confined water
  - Verify that it is waterproof
  - Try it several times on land
  - Try it in the dive center
- 18. Natural geographic formations can be used for:**
- Orientation
  - Reference points to start or end your dive
  - As guides to follow
  - All answers are correct
- 19. If you swim into the open water away from your reference point, you should:**
- Maintain positive buoyancy
  - Take a compass heading to find your way back to the reference point
  - Look back to the reference point to remember it
  - Ascend in open water and swim back on the surface
- 20. One of the most important aspects of natural navigation is planning while you are:**
- At a depth of 33 feet
  - In the water
  - Completely outfitted in your equipment
  - Still at the surface
- 21. When triangulating a compass bearing on two shore-based landmarks, these landmarks should be:**
- 20° apart
  - 360° apart
  - 90° apart
  - Illuminated
- 22. Your swimming distance can be determined by calculating:**
- Arm spans per second + fin kick per minute
  - Feet per fin kick
  - Fin kicks per second x depth
  - Swimming speed in hours
- 23. Natural navigation is the act of orienting yourself to your surroundings, then:**
- Using these surroundings to indicate depth
  - Using these surroundings to indicate temperature
  - Using these surroundings to indicate direction
  - Using these surroundings to find your dive buddy
- 24. Which feature of a compass is especially useful for navigating at night?**
- Built-in flashing light
  - Luminescent face that glows for a period of time after a light has been shined on it
  - Black lubber line
  - A rubber strap
- 25. The difficulty with navigating in limited visibility is that you can never see:**
- The compass
  - Your buddy
  - Daylight
  - The complete picture

# NAVIGATION

## Final Exam | B | English-Imperial

Instructions: Select the best answer from the choices below.  
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- 1. Your swimming distance can be determined by calculating:**
  - A. Arm spans per second + fin kick per minute
  - B. Feet per fin kick
  - C. Fin kicks per second x depth
  - D. Swimming speed in hours
- 2. Natural geographic formations can be used for:**
  - A. Orientation
  - B. Reference points to start or end your dive
  - C. As guides to follow
  - D. All answers are correct
- 3. If you are completely lost, but have sufficient breathing gas, the best thing to do is:**
  - A. Surface and swim back on the surface
  - B. Take a compass heading at the safety stop, and descend to the bottom to swim back
  - C. Make a safety stop and guess where the exit is, then swim back without ascending
  - D. Surface after doing a safety stop, take a compass heading, and drop below the surface to swim back
- 4. One of the most important aspects of natural navigation is planning while you are:**
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- 5. To make an exact square navigation pattern, you must keep track of:**
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  - A. Using these surroundings to indicate depth
  - B. Using these surroundings to indicate temperature
  - C. Using these surroundings to find your dive buddy
  - D. Using these surroundings to indicate direction
- 7. When triangulating a compass bearing on two shore-based landmarks, these landmarks should be:**
  - A. 90° apart
  - B. 20° apart
  - C. 360° apart
  - D. Illuminated
- 8. As you hold the compass it must be level both front-to-back, and:**
  - A. Top-to-bottom
  - B. Side-to-side
  - C. North-to-south
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