

1. The point of sail where the wind is blowing at a 90 degree angle to the long axis of the sailboat is a:

- A. Beam Reach
- B. Broad Reach
- C. Close Reach
- D. Running
- E. Close Hauled
- F. In Irons

2. Which statement is TRUE:

- A. A sailboat on a port tack has the right of way when encountering a sailboat on a starboard tack.
- B. A sailboat must give way when it is overtaking a recreational powerboat.
- C. The sailboat downwind must give way to an upwind boat.
- D. A sailboat has the right of way when approaching a commercial fishing boat engaged in fishing.
- E. A sailboat has the right of way when approaching a tugboat pushing barges.

3. Which line or cable does not attach to the top of the mast?

- A. Boom Vang
- B. Backstay
- C. Boom Topping Lift
- D. Headstay
- E. Shroud

4. Which line attaches to the bottom of a sail and is used to position or trim the sail?

- A. Halyard
- B. Lifeline
- C. Rode
- D. Sheet

5. A line which is attached to the end of the boom and run forward while running with the wind, to prevent the boom from swinging during an accidental jibe, is called a:

- A. Safety Line
- B. Rode
- C. Forward Sheet
- D. Preventer
- E. Halyard

6. What type of a VHF call is for urgent assistance where there is not a grave, imminent danger to the vessel or crew, that is repeated 3 times?

- A. May Day

- B. Pan-pan
- C. Securite
- D. 611

7. As a general guideline, what is the ratio (scope) of how much rode (anchor line) should be let out to the depth of the water? Assume a combination chain (6 feet) and rope anchor in mild wind and seas.

- A. 1 to 1
- B. 3 to 1
- C. 7 to 1
- D. 10 to 1
- E. 14 to 1

8. All of the following are used to adjust the Main sail shape and trim EXCEPT:

- A. Main Sheet
- B. Main Halyard
- C. Backstay
- D. Fair Lead
- E. Boom Vang

9. The wind is starting to blow stronger and you are seeing frequent white caps with some spray. The following statement is TRUE?

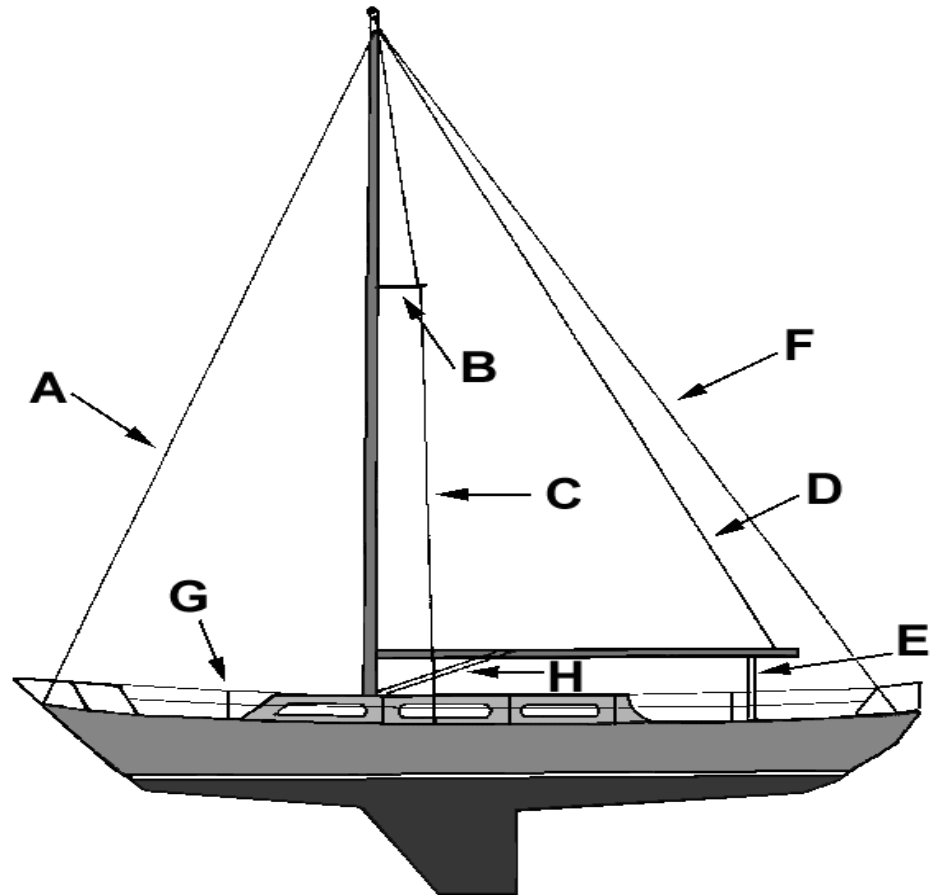
- A. Its time to head home, too much wind.
- B. The wind velocity is probably above 15 knots and one should consider reefing.
- C. The wind is not strong enough to consider reefing in sailboats larger than a dingy.
- D. The sailing conditions are perfect for the beginner learning to sail.

10. Excessive heeling of a sailboat may:

- A. *Increase the leeway or lateral drift of the boat with the wind because the keel is no longer near vertical.*
- B. *Makes the boat harder to steer.*
- C. *Slows the boat.*
- D. *The heel will diminish if you bring your traveler to the lee.*
- E. *All of the Above*

11. The battery power switch should be set on the following:

- A. Place the switch on "1" before starting the engine and "All" after the engine is shut off. This will allow maximum power when under sail.
- B. Place the switch on "All" before starting the engine and to "1" or "2" right after the engine is turned off.
- C. Place the switch on "All" before starting the engine and to "1" or "2" right after the engine starts running.
- D. Always have the switch on "ALL" so both batteries are always used.



Put the appropriate letter after each boat part based on the previous diagram.

12. Boom Vang

13. Stanchion

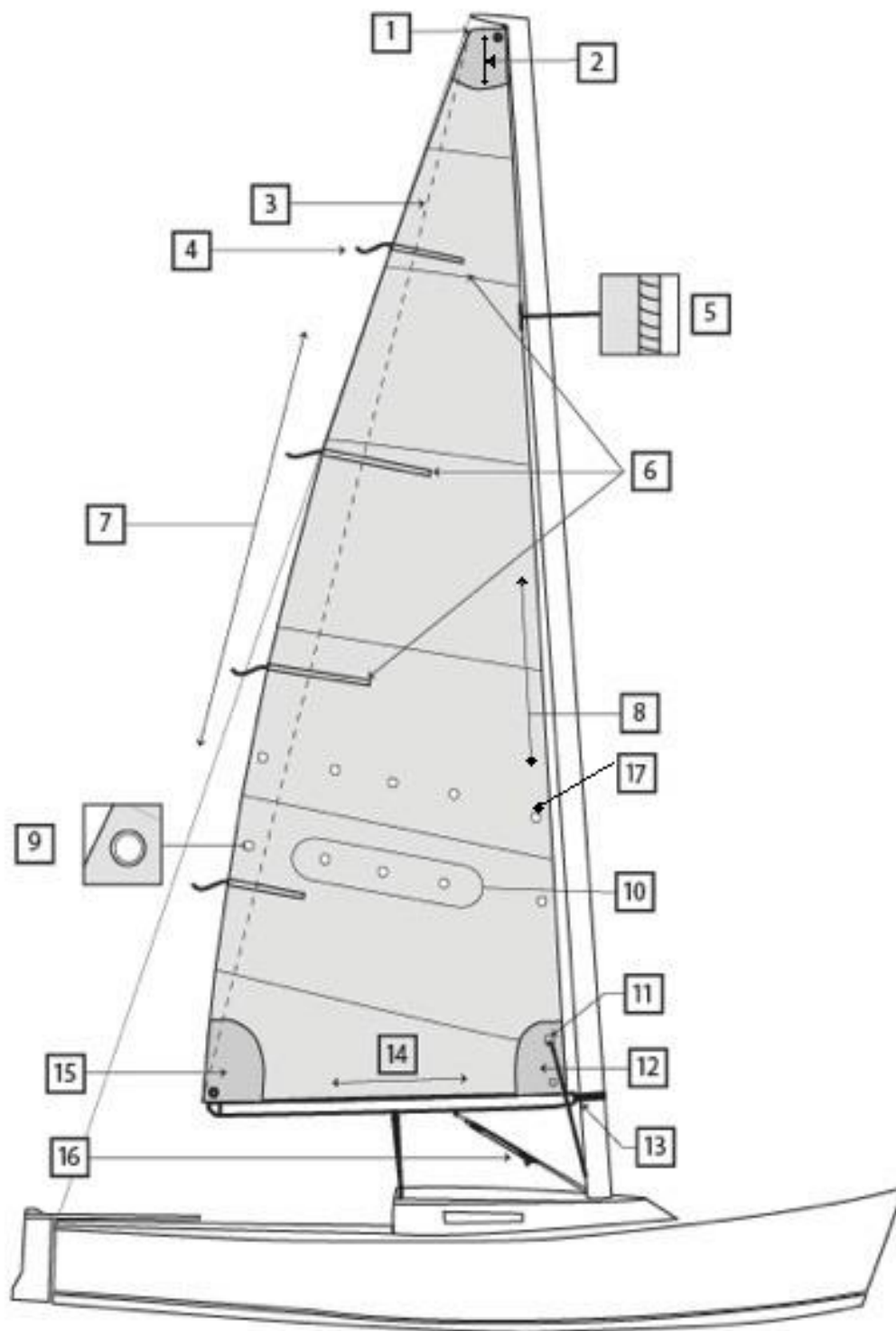
14. Shroud

15. Headstay

16. Boom Topping Lift

17. Spreader

18. Backstay



Identify the following structures on the diagrams above:

- 19.) *A. Headboard*
- B. Boomvang*
- C. Cringle*
- 20.) *A. Luff*
- B. 2nd Reefing Tack*
- C. Gooseneck*
- 21.) *A. Head*
- B. Telltails*
- C. Bolt Rope*
- 22.) *A. Cunningham*
- B. Clew*
- 23.) *A. Roach*
- B. Battens*
- 24.) *A. Leech*
- B. Reefing points*
- 25.) *A. Tack*
- B. Foot*

26. If the engine exhaust's through hull is not spitting water you should check:

- A. The sea strainer.
- B. The raw water system's pump.
- C. The raw water system's seacock.
- D. The exhaust line's attachment to the engine.
- E. All of the above.

27. In the treatment of a crew member that has become seasick, you should:

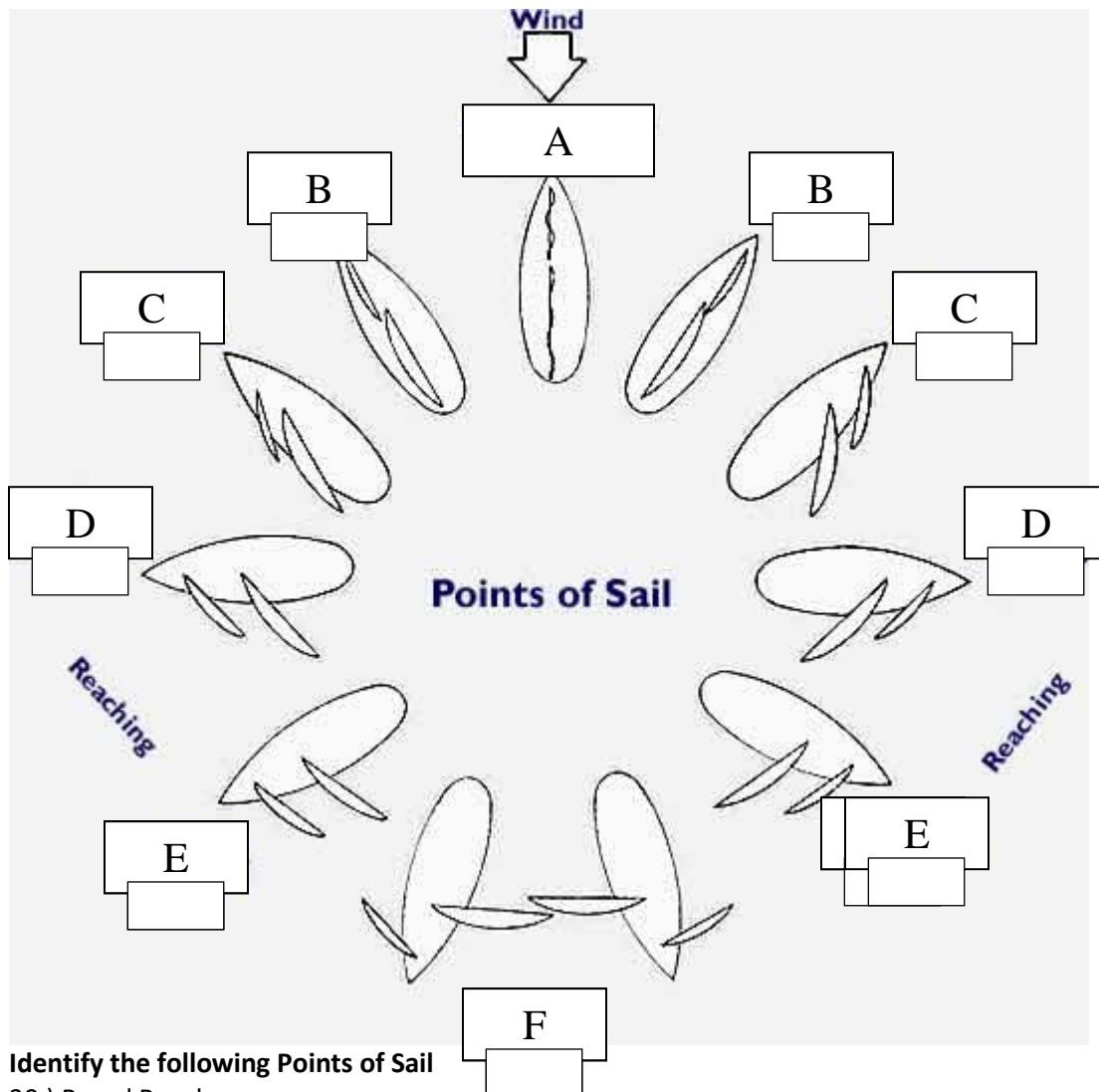
- A. Have him read and try to do chart work.
- B. Give him some alcohol.
- C. Have the crew member in the cockpit and looking to the horizon.
- D. Instruct the other crew members to heave too

28. What should you check when you suspect the boat is taking on water?

- A. Through-hulls
- B. Keel bolts
- C. Stuffing box
- D. Toilet with an open water intake valve
- E. All of the above

29. Which should NOT be done when towing?

- A. Wear your life jackets.
- B. Stand away from the tow line, i.e. in the cockpit or cabin.
- C. set a bridle to distribute the load on the tow line
- D. Place the tow line around a deck stepped mast for best support



30.) Broad Reach

31.) Close Hauled

32.) Beam Reach

33.) No go zone (Irons)

34.) Run

35. When a boat is overtaking another, which boat must keep clear?

- a. The overtaking boat
- b. The slower boat
- c. The smaller boat
- d. The boat that has better control

36. True wind is a term used to describe _____

- a. the actual wind at any given moment
- b. the wind created by the forward movement
- c. the speed at which the dock is approached
- d. the boat movement and the actual wind

37. When sailing on a run, the air flow on a sail _____

- a. drags the boat through the water
- b. pushes the boat through the water
- c. stalls the boat
- d. pulls the boat through the water

38. The line used to raise a sail is called a _____

- a. sheet
- b. uphaul
- c. halyard
- d. rope

39. A sailboat is on a _____ tack when the wind is blowing into the starboard side and the mainsail is on the port side.

- a. starboard
- b. port
- c. either starboard of tack, depending on the conditions
- d. windward

40. "The stern crossing the wind" describes _____

- a. tacking
- b. jibing
- c. docking
- d. capsizing

41. A sailboat on a port tack has the right-of-way over _____

- A.) a closed hauled sailboat on a starboard tack
- B.) sailboat running on starboard tack
- C.) a small powerboat
- D.) a large ship in restricted channel

42. What is a good knot for putting a non-slip, *load bearing "bight"* at the end of a line?

- A.) half hitch
- B.) bowline
- C.) square knot
- D.) figure 8

43. The stays and shrouds are all part of the _____

- A.) working rigging
- B.) running rigging
- C.) master rigging
- D.) standing rigging

44. A block-and-tackle system secured to the boom that prevents the boom from lifting and is used to flatten the mainsail is called the _____

- A.) cunningham
- B.) outhaul
- C.) boom vang
- D.) downhaul

45. When laminar air flow is established along both sides of the sail, the force it creates _____

- A.) pushes the boat forward
- B.) stops the boat
- C.) stalls the sail
- D.) pulls the boat forward and sideways

46. Sail telltales that stream straight back indicate _____

- A.) wind velocity
- B.) smooth air flow
- C.) turbulent air flow
- D.) no airflow

47. Sails are sheeted in tight on a _____

- A.) downwind course
- B.) beam reach

C.) close hauled course

D.) board reach

48. To start tacking, the tiller is _____

A.) moved away from the sail

B.) held straight

C.) moved toward the sail

D.) moved to windward

49. When on a run, you should be concerned about _____

A.) an accidental tack

B.) an accidental jibe

C.) coming about

D.) coming head-to-head

50. Man-overboard situations can be prevented by _____

A.) having a better understanding of how the boat moves and reacts

B.) making sure your crew understands that their balance on a boat is not the same as their balance on land

C.) being aware of all of your surroundings

D.) all of the above

51. On a VHF Radio which button do you press to get to the weather?

A) WPX

B) www.weatherchannel.com

C) WX

D) WQED

52. In order for fully developed seas to occur what three things are needed?

1. _____

2. _____

3. _____

53. The resulting wind speed modified by the boat's forward movement is called _____.

54. The side of the boat that the boom is on, also, away from the wind or down-wind is called _____.

55. What attaches to the clew of the main and adjusts the main sail's foot tension?

56. What is the vertical distance, or depth, measured from the waterline to the lowest point of the boat called? _____

57. The angle at which a boat leans over when sailing is called _____.

58. What is used on a run or broad reach to stop an accidental gybe from bringing the boom across the helm? _____

59. What is the part that connects the forward most part of the boom to the mast? It also works like a swivel allowing the boom to move up and down and swing from side to side.

60. 1 knot equals how many statute miles? _____

61. The tendency of a sailboat to head into the wind if the helm is released (i.e. letting go of the tiller) is referred to as _____ (2 words)

62. What is the name of the wood or plastic strips that act as stiffeners for the sail? They help keep the leech from fluttering and force shape into the roach _____

Match the following definitions with the appropriate terminology:

- | | | |
|---------------------------|-----------------------------------|---------------------|
| A. SHEET BEND | H. BULKHEAD | O. ABAFT |
| B. SPLICE | I. COAMING | P. PITCHPOLE |
| C. STAND-ON VESSEL | J. BITTER END | Q. RODE |
| D. TURNBUCKLE | K. AMIDSHIP | R. SCUPPER |
| E. ROACH | L. LUBBER'S LINE | S. VARIATION |
| F. BATTEN DOWN | M. WATERLINE (Boot Stripe) | |
| G. CHOCK | N. FREEBOARD | |

63. The shape of a sail is seldom a perfect triangle. It is common for sailmakers to add an arc of extra material on the leech, outside a line drawn from the head to the clew. This additional part of the sail is known as the _____; mainsails usually have this feature, but they are very occasionally found on specialist jibs as well. They provide additional power for a given mast/boom size.

64. The last part of a line or chain.

65. In or toward the part of a boat or ship midway between the bow and the stern; toward the middle of the ship or boat.

66. A mark or permanent line on a compass indicating the direction forward; parallel to the keel when properly installed.

67. To turn end over end in very rough seas.

68. The anchor line and/or chain.

69. An opening in the side of a ship at deck level to allow water to run off. An opening for draining off water, as from a floor or the roof of a building.

70. A knot used to join two ropes. Functionally different from a square knot in that it can be used between lines of different diameters.

71. To permanently join two ropes by tucking their strands alternately over and under each other.
72. That vessel which continues its course in the same direction at the same speed during a crossing or overtaking situation, unless a collision appears imminent. (Was formerly called "the privileged vessel.")
73. A threaded, adjustable rigging fitting, used for stays, lifelines, and sometimes other rigging.
74. The angular difference between the magnetic meridian and the geographic meridian at a particular location.
75. A line painted on a hull which shows the point to which a boat sinks when it is properly trimmed.
76. Toward the rear (stern) of the boat, or Aft.
77. Secure hatches and loose objects both within the hull and on deck.
78. A fitting through which anchor or mooring lines are led. Usually U-shaped to reduce chafe.
79. A vertical raised frame or piece around the edge of a cockpit, hatch, etc. to prevent water on deck from running below.
80. A vertical partition separating compartments.
81. The minimum vertical distance from the surface of the water to the gunwale.
82. On a boat with a right-handed screw, the stern of the boat will typically "walk" to the _____ when it is initially shifted into reverse.
83. Which of the following is NOT an accepted convention for the use of a marine radio (i.e. proper operating procedure)
- a. Use of standard calling formats/usage of Mayday, Pan-pan and Securite
 - b. Use of "pro words" such as *Acknowledge, All after, All before, All stations, Confirm, Correct, Correction, In figures, In letters, Over, Out, Radio check, Read back, Received, Repeat, Say again, Spell, Standby, Station calling, This is, Wait, Word after, Word before, Wrong*
 - c. Use Channel 16 for conversation
 - d. Use NATO phonetic alphabet (i.e. Alpha, Bravo, Charlie, etc.)
 - e. Use phonetic numbering system (i.e. *Wun, Too, Tree, Fow-er, Fife, Six, Sev-en, Ait, Nin-er, Zero, Decimal*)
84. What is the quickest way to eliminate weather helm?
- a. Move the traveler toward the high side
 - b. Sheet in the main

- c. Ease the main sheet
- d. Ease the jib sheet
- e. Tighten the halyard

85. In heavy winds, the following describe(s) a properly trimmed main sail.

- a. Luff should be loose
- b. Draft should be aft
- c. Foot should be loose
- d. Twist should be closed
- e. All of the above
- f. None of the above

86. Moving the jib car aft along the jib track will...

- a. Flatten the jib and therefore decrease its draft
- b. Make the jib fuller and therefore increase its draft
- c. Increase tension on the foot relative to the leech
- d. Increase tension on the leech relative to the foot.
- e. A and B
- f. A and C

87. Assuming the jib car was far forward, under what wind condition would you move the jib car aft?

- a. No wind
- b. Light wind
- c. Heavy wind
- d. Backing wind
- e. Oscillating wind

88. As your boat speed increases on an upwind course, assuming the true wind is constant, then the...

- a. direction of the apparent wind remains unchanged
- b. direction of the apparent wind moves toward the bow
- c. direction of the apparent wind moves aft.

89. A wind change that forces you to point further away from your objective is called...

- a. bad luck
- b. a footer
- c. a header
- d. a lifter

90. A wind line off your starboard bow indicates you are in for a big puff, as the crew member controlling the main you should...

- a. trim the mainsheet as the puff hits, then ease it as it passes
- b. ease the mainsheet as the puff hits, then trim as it passes
- c. Call out the puff strength and time to reach boat.
- d. A and C
- e. B and C

91. Your outside jib tell-tale is fluttering, but the inside one is streaming. What can be done to improve your efficiency/increase speed?

- a. Trim jib sheet
- b. Ease jib sheet
- c. Helm can head up
- d. Helm can fall off
- e. B or C
- f. A or C
- g. A or D

92. You notice that there is a “hinge” in your mainsail (vertical wrinkle running the luff), and you are sailing in lite winds, what should you do?

- a. Tighten the halyard
- b. Tighten the outhaul
- c. Tighten the topping lift
- d. Loosen the halyard
- e. Loosen the outhaul

93. If you have light winds the “twist” in your mainsail will work more efficiently if it is...

- a. Open just to the point of almost luffing
- b. Opened
- c. Closed
- d. Twist is irrelevant in light wind situations

94. Which of the following would you NOT do in order “heave to”?

- a. Turn into the wind
- b. Release the loaded jib sheet
- c. Move traveler to the low side
- d. Ease mainsheet
- e. Turn the helm so that it points into the wind until balance is achieved, then secure it.

95. If you lose sight of a MOB, what should someone on the boat do immediately?

- a. Head to port
- b. Use a whistle or horn to call out to the MOB
- c. Keep looking until you find them
- d. Issue a Mayday

96. A bow line should be...

- a. Used to stop the boat
- b. Used to hold the bow in tight when backing out of a slip into a channel
- c. Gently “Snubbed” to control the bow when coming into dock.

97. Which of the following statement are true when the center of buoyancy (COB) and the center of gravity (COG) initially move apart and then converge?
- a. The boat is excessively heeling and may capsize
 - b. The boat is very stable
 - c. This is the point where the boat exerts the greatest force to right itself
 - d. This is the point where the boat exerts the least force to right itself
 - e. A and D
 - f. B and C
98. If your boat no longer goes into gear, what should you do?
- a. If safe, unfurl jib &/or raise mainsail
 - b. Check connection of transmission cable
 - c. Check prop and coupler connection
 - d. Check transmission fluid
 - e. All the above
99. Which of the following should be favored when docking?
- a. Bow to the wind
 - b. Stern to the wind
 - c. Beam to the wind
 - d. Quarter to the wind
100. If the engine is overheating you should check the oil, the fresh water system and the raw water system. Which of the following is NOT something you would check to make sure the raw water system is working correctly?
- a. Sea cock
 - b. Raw water strainer
 - c. reservoir/overflow
 - d. Impeller
 - e. Noe of the above
101. Which statements are true about marine engines
- a. Diesel engines do not have spark plugs
 - b. The compression ratio of a gasoline engine is higher than diesel.
 - c. Diesel engines have carburetors
 - d. Diesel engines are less efficient than gasoline engines
 - e. Gasoline has a higher flashpoint than diesel fuel
102. Which of the following are NOT true statements about sail trim
- a. Sails should be fuller/looser in light wind than heavy wind
 - b. The closer you are sailing to the wind the closer the sails are trimmed to the boat
 - c. The boom should not cross the centerline of the boat to weather
 - d. The traveler is moved to the high side to de-power the main sail by spilling wind

103. A lull can make you think you have encountered a header because the
- a. apparent wind moves away from the bow
 - b. apparent wind gets stronger
 - c. apparent wind moves toward the bow
 - d. true wind changes directions
104. Which are true statements about lift?
- a. The windward side of the sail is the low pressure side.
 - b. The leeward side of the sail is the high pressure side
 - c. Sails luff when the angle of attack is too deep
 - d. Sails stall when the angle of attack is too shallow
 - e. All of the above
 - f. None of the above
105. Which of the following is ALWAYS true?
- a. You can point higher into the wind if your sails are fuller.
 - b. In heavy wind, the draft in the main should be further forward than in light wind.
 - c. A boat is faster when it's heeling
 - d. A boat with more sail area raised is faster
 - e. Idle crew should be sitting on the high side rail.
106. Sailing on a run with the mainsail on the windward side is called?
- a. Sailing Dead Down Wind
 - b. Accidental Gybe
 - c. Chinese Gybe
 - d. Sailing by the Lee
107. When entering a harbor, that uses the IALA-A buoyage system, red buoys should be on which side?
- a. Starboard
 - b. Port
 - c. Stern
 - d. Bow
108. Ignoring magnetic variations, current, and/or drift, what is the reciprocal course of 312 degrees?
- a. 0 degrees
 - b. 213 degrees
 - c. 132 degrees
 - d. 180 degrees

109. When setting up the spinnaker, for a normal set, when the boat is on a starboard tack, the spinnaker turtle and pole should be:
- a. Spinnaker turtle should be on starboard, spinnaker pole should be on starboard.
 - b. Spinnaker turtle should be on port, spinnaker pole should be on port.
 - c. Spinnaker turtle should be on port, spinnaker pole should be on starboard.
 - d. Spinnaker turtle should be on starboard, spinnaker pole should be on port.
110. To avoid hidden rocks and shoals on the approach to Campbeltown harbor range markers where identified on the chart. While helming you noticed that the nearest range marker was to the left of the distant marker, what course should you steer?
- a. Do not alter course
 - b. Steer to port
 - c. Steer to starboard
 - d. Stop the boat immediately
111. What could you do to stop a diesel marine engine with a pull stop cable that is broken?
- a. Turn off the engine using the key
 - b. Turn battery selector switch to off
 - c. Push the solenoid lever on the engine
 - d. Remove the glow plug