

2015 BCC Review Questions and Key – For Instructor Use Only

These review questions will help familiarize you with all the questions found in the written exam. Using the ASA textbook, try to find as many answers as you can before your class review session. You may not be able to find a complete answer to every question. Please note which questions you need additional information on so your instructor can provide more information.

Instructors: Let your students know in advance when the test question review class is happening and encourage them to follow the above instructions. This way you can minimize the time you need to spend in class on the easy stuff. You can even skip over items completely if all the students indicate they are good with those particular questions.

1. Identify the Transom.
See the diagram indicating the part of the stern of the boat between the two halves of the hull.
2. Identify the Binnacle.
See the diagram indicating the pedestal that holds the compass and the steering wheel.
3. Identify the Cockpit locker.
See the diagram indicating the storage space below the cockpit seat.
4. Identify the Companionway.
See the diagram indicating the passageway to enter the cabin.
5. Identify the Starter Cord for an outboard engine.
See the diagram indicating the pull handle at the top of the engine.
6. Identify the Gearshift lever on an outboard engine.
See the diagram indicating the lever at the side of the engine.
7. Identify the Throttle control for an outboard engine.
See the diagram indicating the handle at the end of the engine's tiller.
8. Identify the Propeller on and outboard engine.
See the diagram indicating the component at the bottom of the engine.
9. What is the bilge?
"The lowest part of the interior of the boat"
10. What is a Through-Hull Fitting?
"The fitting in the hull designed to take in or discharge water"
11. Describe the purpose of the Safety Harness.
"To help keep a person attached to the boat"
12. Which is the safer side of the boat to walk forward and aft?
"The windward side of the boat"
13. What is the International Distress, Safety and Calling channel on the VHF Radio?
"Channel 16"
14. What word(s) are used on the VHF Radio announcing the need for assistance but not imminent danger?
"Pan, Pan" (3 times)

15. Name six equipment items required by USCG on a 26-40' sailboat at night.
"USCG Approved PFD for each person aboard, a Type IV Throwable Flotation Device, Fire Extinguisher (2 X Type B-1 or 1 X Type B-II), Sound Making Device, Navigation Lights, Visual Distress Signals."
16. List precautions taken to avoid problems when refilling a Diesel Engine tank.
"Estimate how much fuel you will need using the fuel gauge, Double check that you have the Diesel (vs gasoline) hose, Listen carefully to the sound of the fuel fill to avoid overfilling"
17. Explain the use of the shut off valve for a sailboat auxiliary engine.
Make sure the fuel supply valve is open.
18. Name three important items of equipment &/or publications for coastal navigation.
"A compass, Navigation charts, Timekeeping device"
19. Describe or draw a Danger Buoy.
A white buoy with an orange diamond shape symbol
20. Describe or draw a Safe Water Buoy.
A red and white vertically stripped buoy with a red ball at the top
21. Describe or draw a Can Buoy.
A green flat topped buoy
22. Describe or draw a Nun Buoy.
A red buoy with sides tapering toward the top
23. Describe or draw a Preferred Channel Buoy.
A buoy with red and green horizontal bands
24. Describe or draw a Controlled Area Buoy. (e.g. speed)
A white buoy with an orange circle symbol on it
25. Describe or draw a Green Day Beacon.
A green square sign with an odd number on it
26. Describe or draw a Red Day Beacon.
A red triangle shape with an even number on it
27. Describe or draw the chart symbol for Water Depth (sounding).
Simply a number on the chart indicating the depth at that location
28. Describe or draw the chart symbol for Current.
An arrow symbol possibly with barbs at the opposite end from the point
29. Describe or draw the chart symbol for a Wreck of which only the masts are visible.
A line with three cross hatches surrounded by an oval of dots & "masts" printed
30. Describe or draw the chart symbol for Kelp, Seaweed.
A slightly curved line with branches coming off it
31. Describe or draw the chart symbol for a Mid-channel Buoy.
A standard buoy symbol (diamond with a small circle at the base) but divided red and white vertically through the diamond and a larger circle just off the top
32. Describe or draw the chart symbol for a Can Buoy.
A standard buoy symbol (see above answer) with a letter C next to it
33. Describe or draw the chart symbol for a Nun Buoy.
A standard buoy symbol with a letter N next to it

34. Describe or draw the chart symbol for a Whistle Buoy.
A standard buoy symbol with the letters "Whis" next to it
35. Describe or draw the chart symbol for a Red Buoy.
A standard buoy with the diamond filled in red and a letter R next to it
36. Describe or draw the chart symbol for a Green Buoy.
A standard buoy with the diamond filled in green and the letter G next to it
37. Describe or draw the chart symbol for a Radio Tower.
A small circle with a dot in the middle of it
38. Describe or draw the chart symbol for a Preferred Channel Buoy.
A standard buoy with red and green divided horizontally and RG or GR next to it
39. Explain how to choose the Primary Channel around a preferred channel buoy.
On the diagram a path that can go either side of a safe water buoy and obeys the scheme of the preferred channel buoy and obeys all red and green marks accordingly
40. What is the basis for a Nautical Mile.
"One minute of Latitude"
41. What kind of cloud is most likely to cause a serious problem for sailors?
"Cumulonimbus (high vertical columns of clouds, especially with an anvil-shaped top)"
42. What characteristic of isobars (lines of equal pressure) on a weather map indicates the presence of strong winds.
when the isobars are spaced narrowly (Widely spaced isobars indicate mild wind)
43. What wind conditions can be expected in the presence of Small Craft Warnings?
"...when forecast wind or sea conditions might prove hazardous."
44. In the U.S. where can continuous weather information for sailors be found?
On "marine weather bands (channels) on VHF radio"
45. An approaching storm will have what effect on the barometric pressure?
"Rapidly falling barometric pressure..."
46. What sail combination would be suitable for heavy (20-33knots) wind?
"Reefed mainsail and small headsail"
47. What sail combination would be suitable for very light wind?
"Full mainsail and genoa"
48. Describe three considerations for proper reefing of the mainsail.
"Reefing should be done early, at the first sign of adverse weather/wind. Bring the new tack level with the gooseneck, and then tension the luff before tensioning the clew reefing line. Mainsail should be luffing when being reefed.
49. What is the quickest way to depower sails in order to reduce excessive heeling?
"Ease the mainsail using mainsheet or traveler"
50. Describe activity that can be accomplished as a result of heaving-to.
"...for the crew to rest, fix meals or make repairs without dropping sails."
51. Describe steps to be taken in anticipation of heavy weather.
"Put on a safety harness. Plot your position on the chart. Put on life jackets and foul weather gear."
52. What does three short whistle or horn blasts mean?
"I am operating Astern propulsion."

53. Describe the primary responsibilities of the skipper.
 “Ensuring the crew’s knowledge of operation procedures and location of safety equipment, Safety of the crew and boat, Ensuring safe use of equipment (head, stove, etc.)”
54. Generally, where is the safest part of a boat for stepping off when alongside a dock?
 “At the shrouds”
55. Describe the color and the visibility sector of a starboard side light.
 Green, showing from straight forward to 22.5° abaft the beam on the starboard side
56. Describe the color and the visibility sector of a stern light.
 White, showing **aft** from 22.5° abaft the beam on the port side to 22.5° abaft the beam on the starboard side
57. Describe the color and the visibility sector of a steaming light.
 White, showing **forward** from the mast, from 22.5° abaft the beam on the port side to 22.5° abaft the beam on the starboard side
58. Describe the color and the visibility sector of a port side light.
 Red, showing from straight forward to 22.5° abaft the beam on the port side
59. Of all the lights mentioned above, which ones should be displayed when sailing?
 The red and green side lights, the stern light
60. What kind of light (color and visibility sector) should be displayed when anchored?
 White, visible 360° (in every direction)
61. Of all the lights mentioned above, which ones should be displayed when motoring or motor-sailing?
 The red and green side lights, the stern light (as for sailing) and the steaming light
62. Name two conditions when navigation lights must be displayed?
 “Between sunset and sunrise, and during periods of reduced visibility”
63. Describe two kinds of flags used to indicate diving operations.
 The “alpha” code flag and the red flag with white diagonal band as indicated in the diagram
64. When do the Navigation Rules require the maintenance of a lookout?
 “At all times”
65. Which sailboat is required to give way to the other when both are on the same tack?
 The sailboat to windward as indicated by the diagram
66. What action should be taken when two powerboats approach head-on?
Both powerboats give way, altering course to their right as in the diagram
67. Explain the right-of-way action to be taken when two powerboat approach each other crosswise?
 The powerboat on the left gives way to the one on the right.
68. Explain the right-of-way action to be taken when two sailboats approach each other when they are sailing on opposite tack.
 The sailboat on port tack gives way to the one on starboard tack.

69. Describe two kinds of actions to be taken when it becomes obvious that a collision is imminent. (Although not necessarily inevitable)
Sound a warning signal (5 short and rapid blasts) and “Execute evasive action.”
70. What should be done with oily wastes in the bilge?
“Use approved absorbent pads to collect the wastes”
71. What is the minimum distance from the coast for the dumping of garbage such as food scraps?
Never may “Garbage such as food scraps and packaging may be dumped less than 3 miles off shore” (tricky question on exam suggests packaging as well)
72. Name four characteristics of a good overnight anchorage.
“Shelter, good depth, bottom with good holding, swing room”
73. Name three benefits obtained by using chain as part of the anchor rode.
Reduce chafe, shock absorption, “...used as part of the anchor rode and can help keep the anchor on the bottom”
74. What is generally good scope for anchoring overnight.
In the 5:1 to 7:1 range.
75. How is scope calculated?
Multiplying the combined depth (assuming no tidal change) and the freeboard
76. What should you do if you miss the first attempt to pick up a mooring ball?
“Sail or motor around and try again.”
77. What is the effect of reverse gear on a sailboat with a right-handed prop?
“Stern will move to port.” (for inboard engines)
78. Spring lines control the motion of a boat docked at a slip in which directions?
“Forward and Aft” (A little confusing in text book)
79. What is the prescribed sound signal for sailboats under sail in reduced visibility?
“One prolonged blast followed by two short blasts”
80. In addition to proper sound signals, what else should be done in reduced visibility?
“Hoist a radar reflector, Slow down and use sound signals, Turn on navigation lights”
81. In the event of a dragging anchor, what is the first remedy to try assuming sufficient room is available?
“Increase your scope”
82. What is the best way to rig for towing another boat behind?
“A bowline tied onto a towing bridle at your stern”
83. Describe actions to be taken to help free a boat that is aground.
“Heeling the boat, Kedging off, Taking a tow”
84. What is the best first action to be taken in the event of a backstay failure?
“Turn upwind to remove strain from the rigging” (also tighten mainsheet)
85. What kind of fire is a B-II extinguisher rated to extinguish?
“Petroleum-based (Fuel, Oil)
86. Describe correct actions to be taken in the event of an onboard fire.
“Move all crew upwind of the fire and ensure they are wearing life jackets. Fight the fire from a position where you can escape – have an exit route. Use the fire extinguisher(s) – Pull the pin; Aim at the base of the fire; Squeeze the lever; Sweep side to side (PASS).”

87. What actions should be taken in response to a cabin filling with water?
“Activate bilge pumps”
88. What is the quickest action to stop a prop that is becoming fouled with a line?
“Shift to Neutral”
89. Where should you hold a smoke flare when using it as an emergency signal?
“Hold it low, downwind, and away from the boat”
90. Describe how to retrieve a Man Overboard while under power.
“Keep the propeller away from the MOB at all costs, Wind is still a factor, and your best approach is to windward, When the MOB is attached to the boat, shut down the engines to eliminate propeller hazard”
91. Describe three ways to get a MOB back on board.
“Making a rope elevator from a stout line, Swim ladder or swim step, Using the dinghy as an intermediate stage”
92. Describe how the performance of the daily engine can prevent unexpected engine failure.
Low coolant level can cause it to overheat, low oil level can cause it to seize, etc.
93. What is the first thing to check in the event of a “High Temperature” alarm on an inboard engine?
“Check to see if water is flowing out the exhaust to determine which part of the cooling system has failed”
94. Describe symptoms for Moderate Hypothermia.
“Exhaustion, Incoherence, Loss of muscle control”
95. Discuss appropriate/inappropriate treatments for Hypothermia.
“Get the patient out of the elements and apply external warmth” **appropriate**
“Encourage the patient to drink hot coffee or alcohol” **inappropriate**
“Massage the patient’s arms and legs to increase circulation” **inappropriate**
96. How can you delay the effects of hypothermia when floating in the water wearing a PFD?
“Adopting the H.E.L.P. position”
97. What is a typical use for a Sheet Bend?
“Used to connect 2 lines of unequal diameter”
98. What is a typical use for a Rolling Hitch?
“Used to reduce load on a line or anchor chain”
99. What is a typical use for a Clove Hitch?
“Temporarily secure a fender to a lifeline”
100. What is a typical use for a Round Turn and 2 Half Hitches?
“Used to secure a boat to a piling or ring”