1) A gasoline fuel fill system shall be designed

- a) to activate the fuel nozzle's shut off feature when the volume is approaching the tanks rated capacity
- b) to activate the fuel nozzle's shut off feature when the volume is approaching the tanks maximum capacity
- c) to activate the fuel nozzle's shut off feature when the volume is approaching the systems emission control devices
- d) to activate the fuel nozzle's shut off feature when the volume is approaching the top of the fill hose
- 2) Primer bulbs shall bear a label or marking in accordance with
 - a) 40 CFR 6010.137
 - b) 40 CFR 1060.137
 - c) 33 CFR 183.590
 - d) 33 CFR 183.620
- 3) The definition of an item that is readily accessible is one that is:
- a) Capable of being reached quickly and safely for effective use under any conditions without the use of tools.
- b) Capable of being reached quickly and safely for effective use under emergency conditions without the use of tools.
- c) Capable of being reached quickly and safely for effective use under emergency conditions with the use of tools.
- d) Capable of being reached quickly and safely for effective use during fueling operations and under emergency conditions with the use of tools.
- 4) ABYC H-25 has specific requirements for portable gasoline tanks that
 - a) have capacities from seven to 12 gallons
 - b) have nominal capacities of 12 gallons or less
 - c) have a maximum capacity of 18 gallons
 - d) both a and b

- 5) Which of the following would not be acceptable for anti-siphon protection?
 - a) keeping the fuel feed line above the top of the tank
 - b) installing an anti-siphon device at the tank withdrawal fitting
 - c) installing an electrically operated valve at the tank withdrawal fitting
 - d) installing a manual shut off valve at the tank withdrawal fitting that is accessed through a pry out deck plate
- 6) Portable fuel tank with capacities from seven to 12 gallons shall
 - a) be located and arranged so that any overflow of fuel will safely evaporate
 - b) be located and arranged so that no overflow of fuel can enter the boat
 - c) be located and arranged so that fuel overflow is minimized
 - d) be located and arranged so that overflow of fuel into the boat can controlled
- 7) The label on a gasoline or diesel fuel tank label shall
 - a) state the type of fuel for which the tank is suitable
 - b) be readable as positioned on the installed tank
 - c) indicate the tanks capacity in US gallons/liters
 - d) all of the above
- 8) The rated capacity of a gasoline fuel system is determined by a Fuel System Capacity test which includes the following criteria except
 - a) tested with specific RVP gasoline
 - b) filled from the run-out level
 - c) filled until the automatic fuel nozzle has been activated twice
 - d) tested in the static floating position
- 9) A gasoline fuel filter may not have to meet the 2 ½ minute fire test if
 - a) it is designed and labeled for marine use
 - b) it is installed in an outboard powered boat
 - c) it is located in a compartment void of ignition sources
 - d) all of the above

- 10) Filling and automatic shut off testing for boats under 26 feet include
 - a) angle of heel 17° bow up and 17° bow down
 - b) angle of trim 4° bow up and 4° bow down
 - c) angle of heel 4° starboard and 4° port
 - d) both b and c
- 11) Emission component fuel system testing (as installed)
 - a) has the same grade orientations as the automatic shut off testing
 - b) has the same grade orientations for boats under or over 26 feet
 - c) has different grade orientations for boats under or over 26 feet
 - d) has the same grade orientations for heel and trim
- 12) Separation between gasoline or diesel fuel deck fill fittings and compartment ventilation openings can be
 - a) 24 inches
 - b) 15 inches
 - c) 12 inches
 - d) either a or b
- 13) A non-metallic deck fill which has a metallic cap and/or metallic retaining chain shall be grounded
 - a) True
 - b) False
- 14) In which of the following situations would it be allowable for overflowing fuel from a portable tank to enter the boat
 - a) open outboard boats without enclosed spaces
 - b) open outboard boats with a continuous floor that is liquid-tight to the hull interior
 - c) both a and b must be true
 - d) overflowing fuel is never allowed to enter the boat

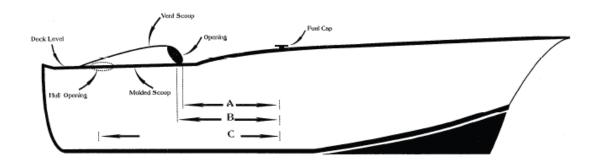
- 15) Fuel fills shall be located and oriented so that no fuel can enter the boat when it is in its static floating position, and fuel overflows
 - a) at a rate of five gpm for five seconds.
 - b) at a rate of five gpm for five minutes.
 - c) the equivalency of .75 liters in fifteen seconds.
 - d) the equivalency of .5 gallons in one minute
- 16) The fuel system of every boat shall be pressure checked to at least three psi (21 kPa), or at 1-½ times the maximum hydrostatic head to which it may be subjected in service, whichever is greater. The duration of testing for an 88 gallon tank is:
 - a) 9 minutes
 - b) 88 minutes
 - c) no more than 9 minutes
 - d) 8 minutes
- 17) A leak detection method in addition to the pressure drop method must be used
 - a) on all fittings and connections in the fuel system
 - b) on inboard or sterndrive boats
 - c) when, after 5 minutes, a pressure drop is noted
 - d) none of the above
- 18) On vessels with multiple fuel tanks and a fuel system that returns unused fuel to the tank (e.g. fuel injection), the system shall return unused fuel to;
 - a) any tank via the valve arrangement.
 - b) the same tank from which it was drawn.
 - c) the tank that is lowest on fuel.
 - d) either tank if the fuel gauge(s) are in plain view of the operator.

- 19) Non-integral tank supports, chocks or hangers shall be separated from metallic tank surfaces by
 - a) non-moisture absorbing material
 - b) non-abrasive material
 - c) permanently bonded to the tank
 - d) all of the above
- 20) A fuel system warning label
 - a) is only required for gasoline fuel systems
 - b) is to be installed at a point of frequent servicing
 - c) is to be included in the boats owner's manual
 - d) either b or c is acceptable
- 21) An installed gasoline or diesel fuel tank may support decks, bulkheads or other structure if it is specifically designed for the purpose
 - a) True
 - b) False
- 22) Portable fuel tanks shall be clearly and permanently marked with
 - a) capacity gallons (liters)
 - b) tank manufacturers name or trade mark and address
 - c) the word "GASOLINE" in 18 point letter size
 - d) the word "DANGER" in 10 point letter size
- 23) If a sight gauge is used in a diesel system it must be equipped with
 - a) a shut off valve at both the top and bottom of the sight gauge
 - b) a shut off valve only at the bottom of the sight gauge
 - c) have a warning label placed in the general vicinity of the sight gauge
 - d) both b and c

National Marine Manufacturers Association **Product Compliance Specialist Examination** Fuel Systems (2013 MY)

ABYC H-24 (10), H-25 (10), H-33 (09, Corrected 07/10)

24) Which of the following measurements is correct to determine the distance between the ventilation opening and the fuel cap:



- a) C
- b) A
- c)B
- d) either A or B is acceptable
- 25) Acceptable colors for marine portable gasoline fuel tanks are
 - a) Red, Black, Brown or Gray
 - b) Gray
 - c) Red or Gray
 - d) Red