

U.S.C.G. Merchant Marine Exam

Apprentice Mate Steersman

Q410 Deck General

(Sample Examination)

Choose the best answer to the following Multiple-Choice Questions.

1. Who must sign the Declaration of Inspection made before oil transfer operations?

- A. Captain of the Port
- B. Person(s) in charge
- C. Master of the vessel
- D. All of the above

Correct answer: B

2. In illustration D038DG below, which letter indicates the tripping palm?

- A. F
- B. G
- C. H
- D. J

Correct answer: B

3. While underway and towing an unmanned tank barge which action are you required to take?

- A. Fly a red flag from the towing vessel
- B. Open the tops of all empty tanks on the barge
- C. Monitor the security and integrity of the tank barge
- D. Take hourly soundings of any loaded tanks on the barge

Correct answer: C

4. On uninspected vessels, when may U. S. Coast Guard approved work vests be substituted for life jackets?

- A. Under no circumstances may they be substituted
- B. Only when aboard work vessels
- C. Only when aboard towing vessels
- D. Only when aboard sailing vessels

Correct answer: A

5. What is the purpose of a "check" line?

- A. A safety line attached to a man working over the side
- B. A line used to measure water depth
- C. A line used to slow the headway of a barge
- D. A line used to measure the overhead height of a bridge

Correct answer: C

6. How is the minimum bursting pressure for each cargo hose assembly determined?

- A. The sum of the relief valve setting plus the static head
- B. Twice the sum of the relief valve setting plus the static head
- C. Three times the sum of the relief valve setting plus the static head
- D. Four times the sum of the relief valve setting plus the static head

Correct answer: D

7. What equipment is NOT used to protect a towing hawser?

- A. Norman pins and tow spans
- B. Hawser boards and chafing gear
- C. Seizing wire, rope yarn and marline
- D. Halyards and snap hooks

Correct answer: D

8. What type of knot in illustration D030DG below is indicated by the Letter "G"?

- A. Fisherman's bend
- B. Round turn and two half hitches
- C. Barrel hitch
- D. Timber hitch

Correct answer: A

9. In a following sea, a wave has overtaken your vessel and thrown the stern to starboard. To continue along your original course, which action should you take?

- A. Use more right rudder
- B. Use more left rudder
- C. Increase speed
- D. Decrease speed

Correct answer: A

10. Which statement about the dangerous cargo manifest is FALSE?

- A. The manifest must be made up by the carrier, agents, and any person designated for this purpose.
- B. The manifest must be kept in a designated holder on or near the bridge.
- C. The hazard class of each cargo must be indicated.
- D. Shipments of hazardous and non-hazardous cargoes may be listed on the manifest if they are destined for the same consignee.

Correct answer: D

11. Which is usually the most gentle way of riding out a severe storm on a larger vessel?

- A. Hove to
- B. Running before the seas
- C. Head into the seas at slow speeds
- D. Rig a sea anchor

Correct answer: B

12. Why is the effect of ocean current usually more evident on a tug and tow than on a tug navigating independently?
- A. The current causes yawing
 - B. The speed of the tug and tow is less
 - C. The current will offset the tow
 - D. The towline catches the current

Correct answer: B

13. To achieve the designed holding power of a stockless anchor, the flukes must be embedded in the sea bottom. Which of the following is also required to reach this condition?
- A. The shank should be upright and perpendicular to the flukes
 - B. The shank should be upright and parallel to the flukes
 - C. The length of chain should be stretched along the bottom and in line with the shank
 - D. The length of chain should be stretched along the bottom and perpendicular to the shank

Correct answer: C

14. Which statement is TRUE concerning the vessel's slipstream?
- A. The propeller gives it a helical motion.
 - B. Its velocity is the same as that of the wake.
 - C. It has no effect on the steering of the vessel.
 - D. It has no effect on the rudder when the helm is amidships.

Correct answer: A

15. What are the health hazard ratings for a product of triethylbenzene?
- A. 0,1,1
 - B. 2,2,2
 - C. 1,1,1
 - D. Unavailable

Correct answer: C

16. What is the number of fire extinguishers required on an uninspected "Motor vessel" based on?
- A. The vessel's length
 - B. The vessel's draft
 - C. The vessel's gross tonnage
 - D. The number of crew members

Correct answer: C

17. Your vessel is being assisted through an ice field in Thunder Bay by the Canadian Coast Guard icebreaker Alexander Henry. The starboard lookout reports that the icebreaker has run up the code flag "N" (November). Which action should you take?
- A. Reverse your engines
 - B. Reduce speed
 - C. Stop your vessel instantly
 - D. Stop your engines

Correct answer: D

18. The owner or Master of a towing vessel must evaluate whether the entire towline, or a part of it, is no longer serviceable. The towline should be removed from service in all cases EXCEPT _____.
- A. in accordance with a replacement schedule
 - B. depending on the mileage or time that the towline has been in service
 - C. when the vessel is underway
 - D. when recommended by the manufacturer or an authorized classification society

Correct answer: C

19. In stopping distances of vessels, which defines the term "head reach"?
- A. The difference between the vessel's speed through the water at any instant and the new speed ordered on the telegraph
 - B. The speed at which a vessel should proceed to ensure that she will run a predetermined distance, once her engines have been stopped
 - C. The distance the vessel has actually run through the water since a change of speed was ordered
 - D. The distance the vessel will run between taking action to stop her and being stationary in the water

Correct answer: D

20. Which factor(s) might indicate that a towline should be removed from service?
- A. Visible damage to the towline, including fishhooks.
 - B. Measurements showing a decrease in diameter.
 - C. A surface condition of corrosion and discoloration.
 - D. All of the above.

Correct answer: D

21. You have been granted authorization to use chemical agents on an oil spill. What is the main purpose for using the chemicals?
- A. To dissolve the oil in the water
 - B. To sink the oil to the bottom of the sea bed
 - C. To facilitate the removal of the pollutant from the water
 - D. To absorb the oil for easy removal

Correct answer: C

22. When more than one vessel is being assisted by an icebreaker, distances between vessels should be constant. Which signal should be given by a vessel which is ahead of another and whose speed suddenly begins to drop?

- A. A flag hoist consisting of the code figure "5"
- B. A flag hoist consisting of the code figure "4"
- C. Four short blasts on the whistle
- D. A flag hoist consisting of the code letters "FE" (Foxtrot-Echo)

Correct answer: A

23. Which statement concerning dual-tonnage vessels is TRUE?

- A. A single-deck vessel may not be assigned dual tonnages.
- B. The dual-tonnage mark must never be submerged beyond the freshwater allowance.
- C. The tonnages referred to are the displacement tonnage and gross tonnage.
- D. The dual-tonnage mark is always marked above the load line marks.

Correct answer: A

24. On a shallow water tow, which is TRUE concerning the catenary of the towline?

- A. The catenary should be small
- B. The catenary should be large
- C. The catenary should be totally eliminated
- D. The catenary should be adjusted frequently

Correct answer: A

25. Which type of bottom is best suited for holding an anchor of a small boat?

- A. Gravel
- B. Sandy
- C. Rocky
- D. Mud and clay

Correct answer: D

26. Which may indicate the proximity of pack ice?

- A. White glare on clouds on the horizon
- B. Frequent changes in air temperature
- C. Rapid changes in seawater salinity
- D. Icebergs

Correct answer: A

27. Which term is given to the process of separating both blocks of a tackle to prepare it for reuse?

- A. Out-hauling
- B. Over-hauling
- C. Two-blocking
- D. Chockablocking

Correct answer: B

28. Which factor(s) must you consider when making up a towing bridle?

- A. The beam of the barge
- B. The horsepower of the tug
- C. The weight of the tow
- D. All of the above

Correct answer: D

29. You have determined the maneuvering characteristics of your vessel by taking the radar ranges and bearings of an isolated light while making a turn. The results are shown in illustration D035DG below. What is the transfer for a turn of 60°?

- A. 105 yards
- B. 155 yards
- C. 205 yards
- D. 255 yards

Correct answer: B

30. You are to load styrene in bulk, which is subject to self-polymerization. In accordance with 46 CFR Table 153 what are you required to do?

- A. Inject nitrogen to pad any ullage above the styrene to prevent contact with oxygen
- B. Be furnished with a Certificate of Inhibition to be maintained on the bridge
- C. Use heating coils to maintain the styrene within the temperatures specified by the shipper
- D. Not carry any cargo in the tanks surrounding the tank loaded with styrene

Correct answer: B

31. What is NOT a requirement for a salvage claim?

- A. The property saved must be "maritime property."
- B. The salvors must save or attempt to save any life in peril.
- C. The salvage service must be voluntary.
- D. The property must be in peril.

Correct answer: B

32. When is the best time to work a boat into a slip?

- A. When the current is setting against you
- B. When the wind is against you
- C. At slack water
- D. When there is a cross current

Correct answer: C

33. Which action can you take to reduce the amount of catenary in the towing hawser?

- A. Make a sharp turn
- B. Lengthen the hawser or reduce the tug's speed
- C. Shorten the hawser or increase the tug's speed
- D. Place your tug in irons

Correct answer: C

34. In illustration D024DG below what does item "A" represent?

- A. drag wire
- B. tandem wire
- C. lashing
- D. scissor wire

Correct answer: C

35. In the machinery space of all uninspected motor vessels, there must be one type 20-B hand portable fire extinguisher for which of the following?

- A. 500 S.H.P. of the main engines or fraction thereof
- B. 1000 S.H.P. of the main engines or fraction thereof
- C. 500 B.H.P. of the main engines or fraction thereof
- D. 1000 B.H.P. of the main engines or fraction thereof

Correct answer: D

36. In illustration D024DG below, what is the purpose of item "G"?

- A. To keep the barges from shifting fore and aft
- B. To prevent the towboat from capsizing if item I should part
- C. To prevent the knee from shifting when the rudder is put hard over
- D. To distribute the vessel's thrust over a wider area

Correct answer: C

37. Which statement about general average is TRUE?

- A. Of the ship, the freight, and the cargo interests, only one need be involved.
- B. Property must have been sacrificed or an expenditure of money incurred.
- C. The loss or damage to deck cargo due to heavy weather constitutes general average.
- D. Damage to a ship must have been incurred while the ship and/or its machinery was being used for its intended purpose.

Correct answer: B

38. How many, and what type, fire extinguishers are required on an unmanned oil barge during transfer operations, if the barge has no cargo pumps aboard?

- A. One B-II or post 2017 One 40-B extinguisher
- B. Two A-II or post 2017 Two 2-A extinguishers
- C. One B-V or post 2017 One 160-B extinguisher
- D. Two B-II or post 2017 Two 40-B:C extinguishers

Correct answer: A

39. You are signing on a crew. When they present their Merchant Mariner Credential, you should suspect a fraudulent document if it has which endorsement listed on it?
- A. Steward's Department (F.H.)
 - B. Any unlicensed rating in the deck department including AB
 - C. Bosun
 - D. Certificate of Registry

Correct answer: C

40. In writing up the logbook at the end of your watch, you make an error in writing an entry. What is the proper means of correcting this error?
- A. Carefully and neatly erase the entry and rewrite it correctly.
 - B. Blot out the error completely and rewrite the entry correctly.
 - C. Remove this page of the log book, and rewrite all entries on a clean page.
 - D. Cross out the error with a single line, and write the correct entry, then initial it.

Correct answer: D

41. In accordance with U.S. regulations which of the following is the proper label name for a class 4.3 substance?
- A. Flammable liquid
 - B. Dangerous when wet
 - C. Spontaneously combustible
 - D. Flammable solid

Correct answer: B

42. What is a grapnel?
- A. A device for securing a chain topping lift
 - B. A hook to prevent the anchor cable from slipping
 - C. A device used to drag for a submerged cable or line
 - D. A type of clam bucket used for discharging bulk cargo

Correct answer: C

43. A tow of 9 barges is made up three abreast and three long. The towboat is faced up to the center string. What is the name of this string?
- A. Push string
 - B. Main string
 - C. Face string
 - D. Power string

Correct answer: A

44. Fire protection regulations for towing vessels require any fuel line to have which item?

- A. A remotely operated positive fuel shut-off valve located near the source of supply
- B. A shut-off check valve at the top of the tank
- C. A drain cock at the lowest point in the fuel line
- D. A gate valve easily operated in the space where the tank is located

Correct answer: A

45. Fire protection regulations for towing vessels require training in all of the following, EXCEPT which of the following?

- A. Putting on a fireman's outfit, if the vessel is so equipped
- B. Refilling and servicing all expended fire extinguishing equipment
- C. Donning a self-contained breathing apparatus, if the vessel is so equipped
- D. Activating the general alarm and reporting inoperative alarm systems and fire-detection systems

Correct answer: B

46. What does the helm command "Steady as you go" mean?

- A. Steer the course you are on now
- B. Steer the course when the swing stops
- C. Maintain the rate of swing
- D. Don't allow the vessel to swing off course so much

Correct answer: A

47. You are pushing a 1,000 GT gasoline tank barge which is not gas free. By regulation, which is TRUE concerning cargo tank hatches, ullage holes, and Butterworth plates on the barge?

- A. Can be open without flame screens in good weather from 16 May to 15 September
- B. Can be open without flame screens when the barge is empty
- C. Can be open without flame screens under the supervision of the senior crew member on duty
- D. Shall not be open without flame screens under any circumstances

Correct answer: C

48. What is the FIRST action to take if you detect oil around your tank vessel while discharging petroleum products?

- A. Call the Master
- B. Have the pumpman check the discharge piping
- C. Shut down operations
- D. Try to find out where the oil is coming from

Correct answer: C

49. What does the term "bollard pull" refer to on a towing vessel?

- A. Propulsion horsepower available
- B. Towing winch capability
- C. Pulling ability at cruise power
- D. Pulling ability under static conditions

Correct answer: D

50. Why is a chain bridle preferable to a wire rope towing bridle on a long ocean tow?
- A. Chain is more flexible and has the ability to absorb shock because of its weight(catenary)
 - B. Requires little maintenance
 - C. Is less subject to wear and damage from abrasion
 - D. All of the above

Correct answer: D

51. If a Master must jettison a container loaded with hazardous material, he must, as soon as possible, notify the _____.
- A. Environmental Protection Agency
 - B. nearest Captain of the Port
 - C. National Hazardous Chemical Response Center
 - D. National Cargo Bureau

Correct answer: B

52. In moderate wind and current what should be the length of chain with a single anchor?
- A. 8 times the depth of the water in deep water
 - B. 2 times the depth of the water in poor holding ground
 - C. 5 times the depth of the water in good holding ground
 - D. 10 times the depth of the water in shallow water

Correct answer: C

53. You observe a V-shaped ripple with the point of the V pointing upstream in a river. What may this indicate?
- A. A sunken wreck, not dangerous to navigation
 - B. A submerged rock, not dangerous to navigation
 - C. A towed-under buoy
 - D. All of the above

Correct answer: C

54. You are the operator of a 290 GRT uninspected towing vessel whose construction was contracted for after August 27, 2003. Which type of semi-portable fire extinguishing system is required on your vessel?
- A. B-V or post 2017 160-B
 - B. B-III or post 2017 140-B
 - C. B-IV or post 2017 150-B
 - D. None of the above

Correct answer: A

55. When instructing a crew member concerning the right way to lift a weight, how should you instruct him/her?

- A. Bend his back and stoop with arms straight
- B. Arch the back to add strength to the muscles
- C. Bend his back and stoop
- D. Bend his knees and lift with his legs

Correct answer: D

56. Your ship is in shallow water and the bow rides up on its bow wave while the stern sinks into a depression of its transverse wave system. What is this called?

- A. Parallel sinkage
- B. Broaching
- C. Fish tailing
- D. Squatting

Correct answer: D

57. You have orders to drop off a barge loaded with propylene oxide at a fleet. In doing so, what must you ensure?

- A. The barge is under the care of a watchman
- B. All wing voids and rakes are pumped dry before tying off the barge
- C. The barge is moored next to the bank where it will be protected from a possible collision
- D. A rake end is facing upstream to minimize the effect of current on the mooring lines

Correct answer: A

58. Which term describes the section of each end of a barge which is heavily reinforced to take the pressure of pushing?

- A. Towhead
- B. Collision bulkhead
- C. Headlog
- D. Bullnose

Correct answer: C

59. When shall an Operator of an Uninspected Passenger Vessel be required to produce his/her MMC?

- A. Immediately, when requested by a USCG boarding officer
- B. Only when the vessel has at least 6 passengers for hire and requested by a USCG boarding officer
- C. An Operator of an Uninspected Passenger Vessel is not required to carry his/her MMC
- D. Only when the vessel is involved in a marine accident

Correct answer: A

60. A vessel is involved in a casualty. The cost of property damage includes the _____.
- A. loss of revenue while the vessel is being repaired, up to a maximum of \$50,000
 - B. cost of labor and material to restore the vessel to the service condition which existed before the casualty
 - C. damage claims awarded to individuals or companies involved in the casualty, up to a maximum of \$50,000
 - D. All of the above

Correct answer: B

61. After casting off moorings at a mooring buoy in calm weather, which action should you take?
- A. Go full ahead on the engine(s)
 - B. Back away a few lengths to clear the buoy and then go ahead on the engines
 - C. Go half ahead on the engines and put the rudder hard right
 - D. Go half ahead on the engines and pass upstream of the buoy

Correct answer: B

62. Which statement is TRUE when using the anchor to steady the bow while approaching a dock?
- A. The anchor cable must never lead under the hull
 - B. Using an offshore anchor decreases the chances of the anchor holding
 - C. The vessel will tend to take a large sheer towards the side where the anchor is down
 - D. Steering control is ineffective in trying to turn to the side opposite to that of the anchor being used

Correct answer: B

63. Which document is used to indicate suspected cargo damage caused by rough weather?
- A. The cargo report
 - B. The Unseaworthy Certificate
 - C. The hull damage report
 - D. The Master's Note of Protest

Correct answer: D

64. Which spaces are required to be segregated from cargo tanks carrying grades A, B, C, or D cargoes?
- A. Enclosed deck spaces
 - B. Navigation spaces
 - C. Pump rooms
 - D. Cofferdams

Correct answer: B

65. Which uninspected vessel is required to carry an efficient daylight signaling lamp?
- A. 99 GT towing vessel on Inland Waters
 - B. 299 GT towing vessel on a coastwise voyage
 - C. 199 GT towing vessel on an international voyage
 - D. 199 GT towing vessel on a coastwise voyage

Correct answer: C

66. The Federal Water Pollution Control Act requires the person in charge of a vessel to immediately notify the Coast Guard as soon as he knows of any oil discharge. Failure to notify the Coast Guard can lead to a monetary fine and imprisonment up to what duration?

- A. 5 years
- B. 3 years
- C. 2 years
- D. 1 years

Correct answer: A

67. According to regulations, how many hand portable fire extinguishers are required in the cargo tank area of an unmanned, cargo pump-equipped tank barge (90 GT) while engaged in transferring grade B flammable liquids?

- A. One B-II or post 2017 One 40-B:C extinguisher
- B. Two B-II or post 2017 Two 40-B:C extinguishers
- C. Three A-II or post 2017 Three 2-A extinguishers
- D. None are required if it has a fixed system installed

Correct answer: B

68. While heaving in the anchor prior to entering the wildcat you observe four white links on each side of a red link. What does this indicate?

- A. There are eight shots in the chain locker
- B. There are eight shots on deck
- C. There are four shots on deck
- D. There are four shots in the chain locker

Correct answer: C

69. A tug is "in irons" when held in a fixed position by _____.

- A. the towing hawser snagged on the bottom
- B. the weight of its tow, its being anchored, or grounded
- C. lack of power or an engine breakdown
- D. an adverse current

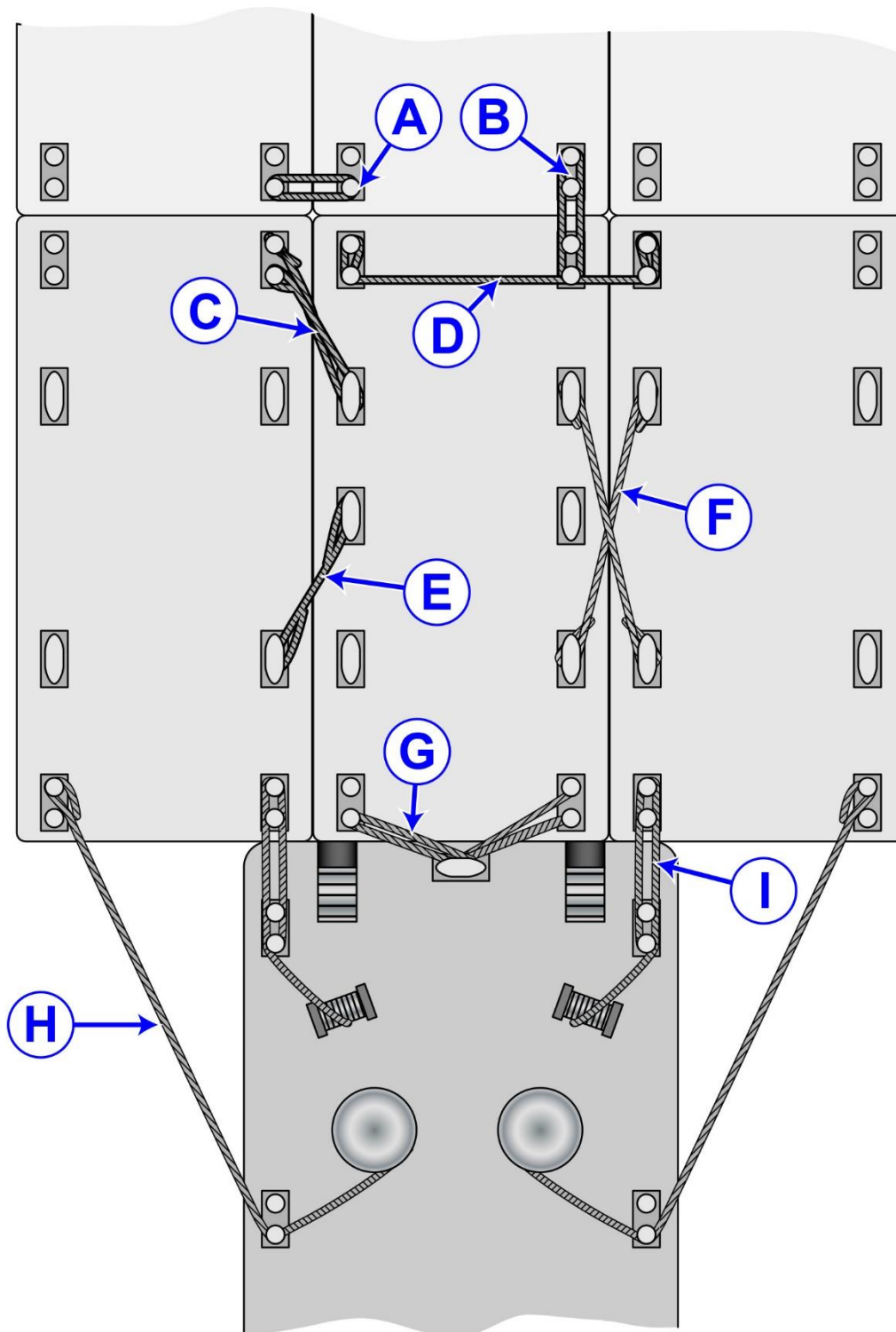
Correct answer: A

70. A block and tackle is "rove to advantage". What does this mean?

- A. The hauling part leads through the movable block
- B. The blocks have been overhauled
- C. The hauling part leads through the standing block
- D. The hauling parts of two tackles are attached

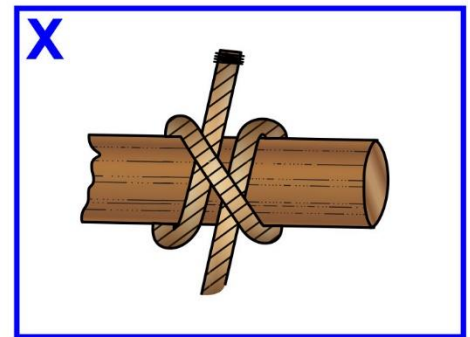
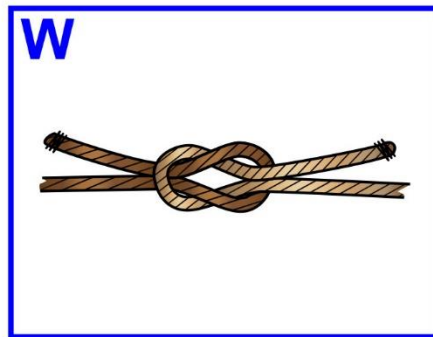
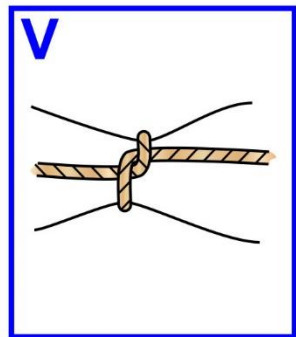
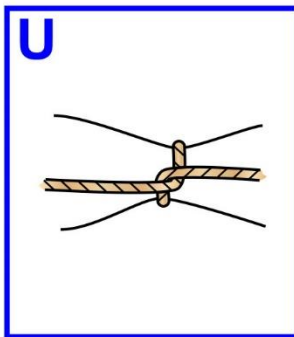
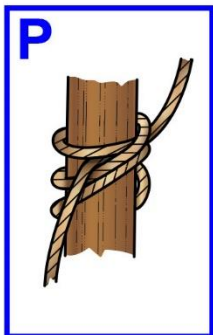
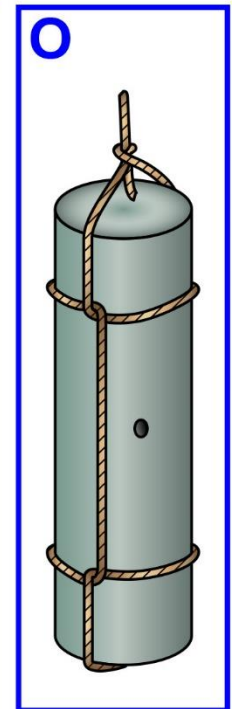
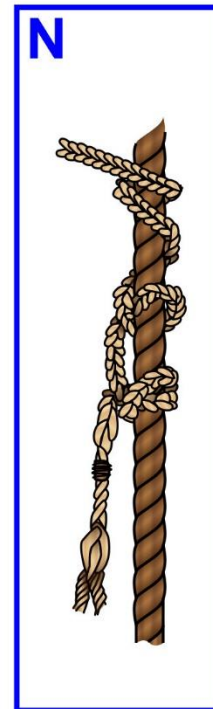
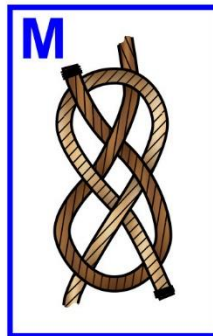
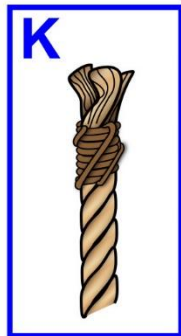
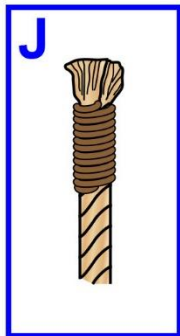
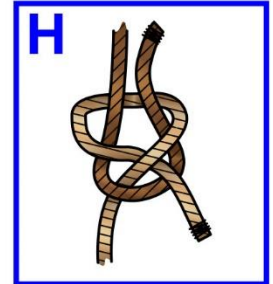
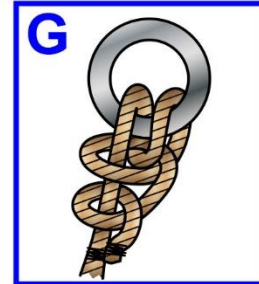
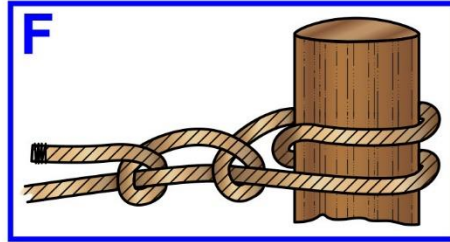
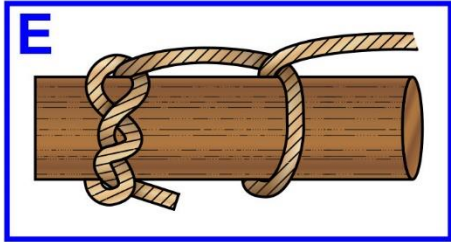
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D024DG



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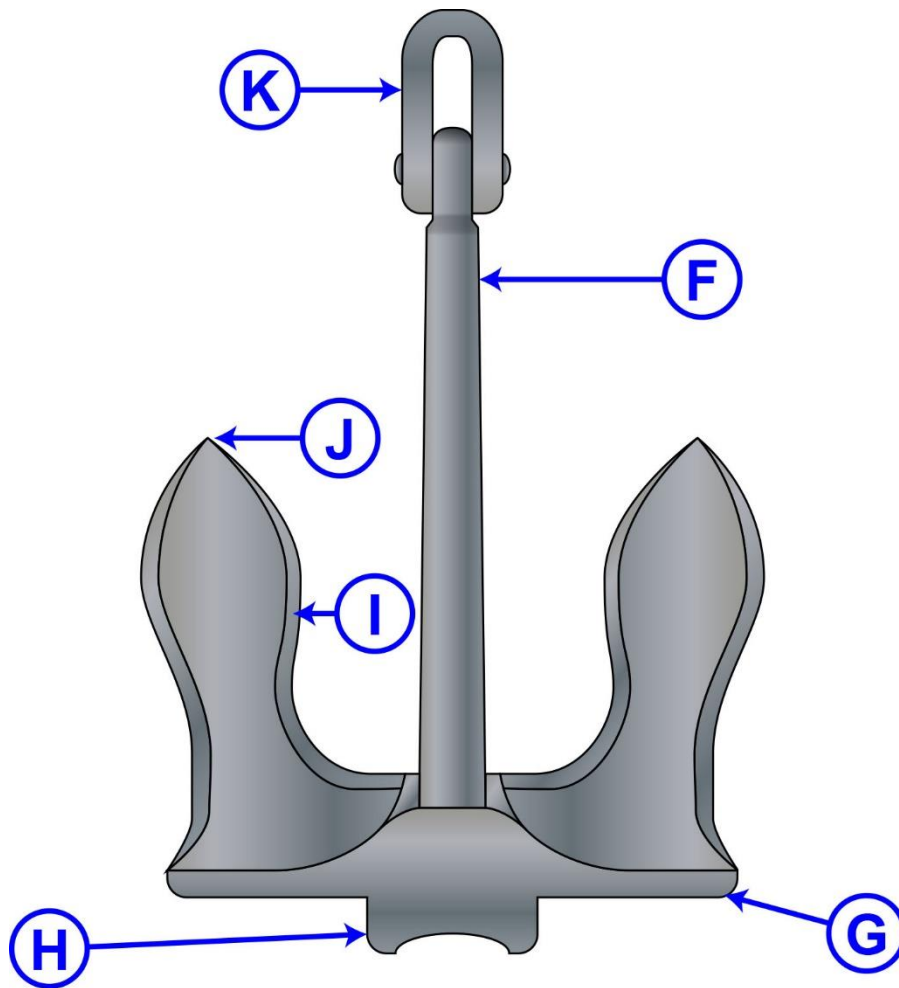


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D035DG

HEADING (TRUE)	BEARING (TRUE)	RANGE (YDS)	REMARKS
333°			INITIAL HEADING
333°	315°	2125	ON INITIAL COURSE
333°	310°	1650	LEFT FULL RUDDER ORDERED
327°	307°	1475	
310°	303°	1250	
278°	302°	1050	
268°	305°	900	
236°	318°	750	
196°	337°	800	
157°	344°	1100	
113°	340°	1350	
079°	332°	1525	
050°	324°	1575	
022°	318°	1550	
343°	308°	1400	RUDDER AMIDSHIPS
333°	302°	1175	STEADY ON 333°

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