

U.S.C.G. Merchant Marine Exam  
Mate of Unlimited Tonnage  
Q309 Deck Safety  
(Sample Examination)

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

1. If you reach shore in a liferaft, the first thing to do is \_\_\_\_\_.

- (A) set the raft back out to sea so someone may spot it
- (B) drag the raft ashore and lash it down for a shelter
- (C) find some wood for a fire
- (D) get the provisions out of the raft

*If choice B is selected set score to 1.*

2. To launch a liferaft by hand, you should \_\_\_\_\_.

- (A) throw the liferaft over the side and pull the operating cord
- (B) cut the casing bands, throw the raft over the side and it will inflate by itself
- (C) cut the casing bands, throw the raft over the side and pull the operating cord
- (D) detach the operating cord, throw the liferaft over the side and it will then inflate

*If choice A is selected set score to 1.*

3. If you are forced to abandon ship in a rescue boat, you should \_\_\_\_\_.

- (A) head for the nearest land
- (B) head for the closest sea-lanes
- (C) remain in the immediate vicinity
- (D) vote on what to do, so all hands will have a part in the decision

*If choice C is selected set score to 1.*

4. What does a pyrometer measure on a diesel engine?

- (A) Exhaust temperature
- (B) Air box pressure
- (C) Water pressure
- (D) Water temperature

*If choice A is selected set score to 1.*

5. It is necessary to secure the forced ventilation to a compartment where there is a fire to \_\_\_\_\_.

- (A) extinguish the fire by carbon monoxide smothering
- (B) prevent additional oxygen from reaching the fire
- (C) allow the exhaust fans to remove smoke
- (D) protect fire fighting personnel from smoke

*If choice B is selected set score to 1.*

6. If help has not arrived in 10-12 hours after abandoning a vessel in a rescue boat, you should \_\_\_\_\_.

- (A) go in one direction until the fuel runs out
- (B) shut down the engines if installed and put out the sea anchor
- (C) steer a course for the nearest land
- (D) steer a course for the nearest sea lane

*If choice B is selected set score to 1.*

7. The bypass valve on a self-contained breathing device should be opened if \_\_\_\_\_.

- (A) the facepiece of the breathing device is too tight
- (B) you are entering a space containing explosive gases
- (C) you are entering a space containing poisonous vapors
- (D) the regulator of the breathing apparatus malfunctions

*If choice D is selected set score to 1.*

8. You see an iceberg that has not been reported. What kind of radio message do you transmit to warn others?

- (A) Routine message
- (B) Safety message
- (C) Distress message
- (D) Urgency message

*If choice B is selected set score to 1.*

9. Which type of weld testing can be used to detect internal flaws?

- (A) Dye penetrant
- (B) Chemical reaction
- (C) Radiographic
- (D) Magnetic particle

*If choice C is selected set score to 1.*

10. For the purpose of training and drills, if reasonable and practicable, how frequently should rescue boats be launched with their assigned crew?

- (A) once a year
- (B) once a week
- (C) once a month
- (D) twice a year

*If choice C is selected set score to 1.*

**11.** A person has fallen overboard and is being picked up with a lifeboat. If the person appears in danger of drowning, the lifeboat should make \_\_\_\_\_.

- (A) an approach across the wind
- (B) an approach from windward
- (C) the most direct approach
- (D) an approach from leeward

*If choice C is selected set score to 1.*

**12.** The ceiling is \_\_\_\_\_.

- (A) a wooden protection placed over the tank top
- (B) material driven into seams or cracks to prevent leaking
- (C) the overhead in berthing compartments
- (D) None of the above are correct

*If choice A is selected set score to 1.*

**13.** The spread of fire is prevented by \_\_\_\_\_.

- (A) removing combustibles from the endangered area
- (B) cooling surfaces adjacent to the fire
- (C) shutting off the oxygen supply
- (D) All of the above

*If choice D is selected set score to 1.*

**14.** Progressive flooding is controlled by securing watertight boundaries and \_\_\_\_\_.

- (A) transferring water ballast
- (B) abandoning ship
- (C) pumping out flooded compartments
- (D) jettisoning cargo

*If choice C is selected set score to 1.*

**15.** According to the regulations for lifeboat falls, which action must be taken at 30-month intervals?

- (A) End-for-ended
- (B) Inspected
- (C) Weight tested
- (D) Renewed

*If choice A is selected set score to 1.*

**16.** The greatest effect on stability occurs from loose liquids flowing \_\_\_\_\_.

- (A) from fore to aft in the tanks of a vessel
- (B) from side to side in the tanks of the vessel
- (C) in and out of a vessel that is holed in a wing tank
- (D) in and out of a vessel that is holed in a peak tank

*If choice C is selected set score to 1.*

**17.** When a man who is conscious has fallen overboard is being picked up by a lifeboat, the boat should approach with the wind \_\_\_\_\_.

- (A) ahead and the victim just off the bow
- (B) just off the bow and the victim to leeward
- (C) just off the bow and the victim to windward
- (D) astern and the victim just off the bow

*If choice B is selected set score to 1.*

**18.** In illustration D033DG below, what is the strake of shell plating indicated by letter H known as?

- (A) bilge strake
- (B) garboard strake
- (C) sheer strake
- (D) outboard keel plate

*If choice B is selected set score to 1.*

**19.** The term that indicates how many tons of cargo a vessel can carry is \_\_\_\_\_.

- (A) bale cubic
- (B) deadweight
- (C) loaded displacement
- (D) gross tonnage

*If choice B is selected set score to 1.*

**20.** What is the purpose of a striker plate?

- (A) Absorbs machinery vibration
- (B) Provides surface for applying force on machinery
- (C) Prevents valve stem over-travel
- (D) Provides landing surface for the sounding bob

*If choice D is selected set score to 1.*

**21.** Ventilation systems connected to a compartment in which a fire is burning are normally closed to prevent the rapid spread of the fire by \_\_\_\_\_.

- (A) spontaneous combustion
- (B) conduction
- (C) radiation
- (D) convection

*If choice D is selected set score to 1.*

**22.** You are at sea and have received a General Emergency message announcing the outbreak of war in Europe. You are directed to comply with the instructions in NGA (NIMA) PUB 117, Chapter Eight. Which statement is TRUE?

- (A) If on a coastwise voyage along the east coast of the U.S., you should put into the nearest port.
- (B) You should only enter a port in the danger zone during hours of darkness.
- (C) You should attempt to submit an AMVER report to NSA.
- (D) When over 200 hundred miles from a port in the danger zone, you should not darken ship.

*If choice C is selected set score to 1.*

**23.** Which is NOT an advantage of the flush method of welded shell plating?

- (A) Reduces weight
- (B) Reduces plate stress
- (C) Keeps practically 100% of tensile strength at the joints
- (D) Reduces frictional resistance

*If choice B is selected set score to 1.*

**24.** You are proceeding to a distress site and expect large numbers of people in the water. Which statement is TRUE?

- (A) You should stop to windward of the survivors in the water and only use the ship's boats to recover the survivors.
- (B) If the survivors are in inflatable rafts you should approach from windward to create a lee for the survivors.
- (C) Survivors in the water should never be permitted alongside due to the possibility of injury from the vessel.
- (D) An inflatable liferaft secured alongside can be an effective boarding station for transfer of survivors from the boats.

*If choice D is selected set score to 1.*

**25.** The wooden planking that protects the tank top from cargo loading is called \_\_\_\_\_.

- (A) toms
- (B) ceiling
- (C) frames
- (D) shores

*If choice B is selected set score to 1.*

**26.** Free communication will adversely affect transverse stability only when the flooded space is \_\_\_\_\_.

- (A) completely flooded
- (B) open to the sea above and below the waterline
- (C) off-center
- (D) on the centerline

*If choice C is selected set score to 1.*

**27.** The order of importance in addressing damage control is \_\_\_\_\_.

- (A) control fire, restore vital services, control flooding
- (B) restore vital services, control fire, control flooding
- (C) control fire, control flooding, repair structural damage
- (D) control flooding, control fire, repair structural damage

*If choice C is selected set score to 1.*

**28.** You must shore up a bulkhead due to solid flooding forward. The bulkhead approximates a rectangle. The center of pressure of the shores on the bulkhead should be located \_\_\_\_\_.

- (A) approximately one-third of the way up the bulkhead
- (B) approximately halfway up the bulkhead
- (C) evenly over the surface of the bulkhead
- (D) at the bottom of the bulkhead

*If choice A is selected set score to 1.*

**29.** The brickwork surrounding the firebox of a boiler is known as \_\_\_\_\_.

- (A) the water wall
- (B) refractory
- (C) the screen wall
- (D) fire plate

*If choice B is selected set score to 1.*

**30.** If passengers are on board when an abandon ship drill is carried out, they should \_\_\_\_\_.

- (A) take part
- (B) stay out of the way and do what they want
- (C) watch
- (D) go to their quarters

*If choice A is selected set score to 1.*

**31.** A fire in a pile of canvas is classified as class \_\_\_\_\_.

- (A) A
- (B) B
- (C) C
- (D) D

*If choice A is selected set score to 1.*

**32.** You are fighting a class "B" fire with a portable dry chemical extinguisher. The discharge should be directed \_\_\_\_\_.

- (A) to bank off a bulkhead onto the fire
- (B) over the top of the fire
- (C) at the seat of the fire, starting at the near edge
- (D) at the main body of the fire

*If choice C is selected set score to 1.*

**33.** You have carbon tetrachloride as part of the cargo. If a fire breaks out in the general area, what is the major danger from the carbon tetrachloride?

- (A) Phosgene gas may be formed if it comes in contact with hot metal.
- (B) You cannot use water to fight the fire because it will react with the carbon tetrachloride.
- (C) It will explode if exposed to a flame.
- (D) It will burn rapidly once ignited.

*If choice A is selected set score to 1.*

**34.** The main advantage of a steady stream of water on a class "A" fire is that it \_\_\_\_\_.

- (A) breaks up and cools the fire
- (B) washes the fire away
- (C) protects the firefighting crew
- (D) removes the oxygen

*If choice A is selected set score to 1.*

**35.** A fire hose with a nozzle attached must be connected to each hydrant except when exposed to heavy weather or when the \_\_\_\_\_.

- (A) fire hose might be damaged by cargo operations
- (B) vessel is in port
- (C) fire pumps are used for purposes other than supplying water to the fire main
- (D) fire-main system is not charged

*If choice A is selected set score to 1.*

**36.** The gross weight of a fully charged CO<sub>2</sub> cylinder is 80 lbs. When the bottle is empty it weighs 60 lbs. What is the minimum acceptable gross weight of the CO<sub>2</sub> bottle before it should be recharged by the manufacturer?

- (A) 55 lbs
- (B) 68 lbs
- (C) 78 lbs
- (D) 82 lbs

*If choice C is selected set score to 1.*

**37.** The outlet at a fire hydrant may be positioned anywhere from horizontal to pointing \_\_\_\_\_.

- (A) vertically upward
- (B) 45° upward
- (C) vertically downward
- (D) all of the above

*If choice C is selected set score to 1.*

**38.** Recharging a previously used cartridge-operated dry-chemical extinguisher is accomplished by \_\_\_\_\_.

- (A) recharging the cartridge and refilling it with powder
- (B) authorized fire equipment servicing personnel only
- (C) replacing the propellant cartridge and refilling with powder
- (D) puncturing the cartridge seal after installation

*If choice C is selected set score to 1.*

**39.** In weighing CO<sub>2</sub> cylinders, they must be recharged if weight loss exceeds \_\_\_\_\_.

- (A) 15% of weight of full bottle
- (B) 10% of weight of charge
- (C) 10% of weight of full bottle
- (D) 20% of weight of charge

*If choice B is selected set score to 1.*

**40.** Carbon dioxide as a fire fighting agent has which advantage over other agents?

- (A) It is cheaper.
- (B) It is safer for personnel.
- (C) It is most effective on a per unit basis.
- (D) It causes minimal damage.

*If choice D is selected set score to 1.*

**41.** What is the MOST important consideration when determining how to fight an electrical fire?

- (A) Whether the fire is in machinery or passenger spaces
- (B) Maintaining electrical power
- (C) The amount of toxic fumes created by the extinguisher
- (D) Danger of shock to personnel

*If choice D is selected set score to 1.*

**42.** A large fire, involving class "A" material, has developed in the ship's galley. In combating this fire, you should \_\_\_\_\_.

- (A) have a hose team cool the galley door, then open the door and extinguish the fire using a type B-II extinguisher
- (B) cool adjoining horizontal and vertical surfaces before opening the galley door
- (C) keep the galley door closed until all the class "A" material has been consumed by the fire
- (D) advance the hose team into the galley without any preparatory action

*If choice B is selected set score to 1.*

**43.** When approaching a fire from leeward you should shield fire fighters from the fire by using \_\_\_\_\_.

- (A) low-velocity fog
- (B) foam spray
- (C) a straight stream of water
- (D) high-velocity fog

*If choice D is selected set score to 1.*

**44.** Fire in an engine compartment is best extinguished with carbon dioxide gas (CO<sub>2</sub>) and by \_\_\_\_\_.

- (A) closing the compartment except for the ventilators
- (B) leaving the compartment open to the air
- (C) increasing the air flow to the compartment by blowers
- (D) completely closing the compartment

*If choice D is selected set score to 1.*

**45.** You have abandoned ship and are in charge of a liferaft. How much water per day should you permit each occupant to drink after the first 24 hours?

- (A) 1 pint
- (B) 1 can
- (C) 1 quart
- (D) 1 gallon

*If choice A is selected set score to 1.*

**46.** When transferring survivors from a survival craft to a rescue vessel, personnel on board the craft should \_\_\_\_\_.

- (A) remain seated inside the survival craft and make the transfer one person at a time
- (B) enter the water and swim over to the rescue vessel
- (C) remove their lifejackets to make it easier to climb on board the rescue vessel
- (D) climb on top of the survival craft while waiting their turn to transfer to the rescue vessel

*If choice A is selected set score to 1.*

**47.** While you are on watch, you learn that a crewman has not been seen on board for the past three hours. Which type of turn is best in this man-overboard situation?

- (A) Scharnow
- (B) Racetrack
- (C) Round
- (D) Single turn of 180°

*If choice A is selected set score to 1.*

**48.** You are on watch and see a man fall overboard. Which man overboard turn should NOT be used in this situation?

- (A) Racetrack
- (B) Scharnow
- (C) Single turn
- (D) Williamson

*If choice B is selected set score to 1.*

**49.** A situation has occurred in which your vessel must be towed. When the towing vessel passes the towing line to you, you should secure the line \_\_\_\_\_.

- (A) to the forward part of the deckhouse
- (B) to the forward-most bitts
- (C) to the base of the foremast
- (D) at the stern

*If choice B is selected set score to 1.*

**50.** You are approaching a ship that is broken down and are preparing to take her in tow. BEFORE positioning your vessel to pass the towline, you must \_\_\_\_\_.

- (A) compare the rate of drift between the ships
- (B) install chafing gear on the towline
- (C) secure the bitter end of the towing hawser to prevent loss if the tow is slipped
- (D) have traveling lizards rigged to guide the towline while it is paid-out

*If choice A is selected set score to 1.*

**51.** What is the penalty for failure to enforce, or comply with, the vessel bridge-to-bridge radiotelephone regulations?

- (A) \$5,000 fine and imprisonment for not more than one year, or both
- (B) Civil penalty of no more than \$5,000
- (C) Civil penalty of no more than \$650
- (D) \$1,000 fine or imprisonment for not more than two years

*If choice C is selected set score to 1.*

**52.** You are the first vessel to arrive at the scene of a distress. Due to the volume of traffic on the radio, you are unable to communicate with the vessel in distress. Which action should you take?

- (A) Broadcast "Charlie Quebec-Mayday-Quiet".
- (B) Switch to flag hoists.
- (C) Key the microphone three times in quick succession.
- (D) Broadcast "Seelonce Distress".

*If choice D is selected set score to 1.*

**53.** What is the spoken emergency signal for a distress signal over a VHF radio?

- (A) Red Alert
- (B) Pan
- (C) Security
- (D) Mayday

*If choice D is selected set score to 1.*

**54.** You are underway in mid-ocean, when you hear a distress message over the VHF radio. The position of the sender is 20 miles away. What action should you take?

- (A) Do not acknowledge because you are too far away to take action.
- (B) Do not acknowledge receipt until other ships nearer to the distress have acknowledged.
- (C) Immediately acknowledge receipt of the distress message.
- (D) Defer acknowledgment for a short interval so that a coast station may acknowledge receipt.

*If choice C is selected set score to 1.*

**55.** The color of rockets, shells, or rocket parachute flares used to indicate that the vessel is in distress and requires immediate assistance is \_\_\_\_\_.

- (A) white
- (B) green
- (C) yellow
- (D) red

*If choice D is selected set score to 1.*

**56.** By day, what is the signal meaning, "This is the best place to land"?

- (A) white smoke signal
- (B) vertical motion of a red flag
- (C) white star rocket
- (D) vertical motion of a white flag or the arms

*If choice D is selected set score to 1.*

**57.** The tops of the thwarts, side benches, and the footings of a lifeboat are painted which color?

- (A) Red
- (B) White
- (C) International orange
- (D) Yellow

*If choice C is selected set score to 1.*

**58.** An emergency sea anchor may be constructed by using \_\_\_\_\_.

- (A) a boat bucket
- (B) an air tank filled with water
- (C) an oar and canvas weighted down
- (D) All of the above

*If choice D is selected set score to 1.*

**59.** What could be a result of insufficient lubrication of lifeboat winches and davits?

- (A) Corroding of sheaves on the davits so they will not rotate
- (B) Moisture accumulation in winch motor damaging the electrical wiring
- (C) Freezing of gears in cold weather
- (D) All of the above

*If choice D is selected set score to 1.*

**60.** You have abandoned ship and find yourself aboard a lifeboat in a heavy sea. Your boat is able to make way through the water. To prevent broaching, you should \_\_\_\_\_.

- (A) place everyone as far forward in the boat as possible to keep the bow heavy
- (B) put the sea on your stern and run as fast as the boat will go
- (C) head the boat into the swells to take them at a 30 to 40 degree angle on either bow and run as slow as possible without losing steerage
- (D) take no action to prevent broaching as this is a recommended maneuver in a heavy sea

*If choice C is selected set score to 1.*

**61.** When retrieving the survival craft, the helmsman should instruct the crewman to \_\_\_\_\_.

- (A) take the life preservers off
- (B) open the doors
- (C) check the fuel level
- (D) check that hooks are fully locked in place

*If choice D is selected set score to 1.*

**62.** In illustration D014SA below, which item number correctly identifies the sea anchor?

- (A) 1
- (B) 12
- (C) 14
- (D) 18

*If choice D is selected set score to 1.*

**63.** What is placed on the underside of an inflatable liferaft to help prevent it from being skidded by the wind or overturned?

- (A) Strikes
- (B) Sea anchor
- (C) A keel
- (D) Ballast bags

*If choice D is selected set score to 1.*

**64.** Life jackets should be marked with the \_\_\_\_\_.

- (A) stowage space assigned
- (B) vessel's name
- (C) maximum weight allowed
- (D) vessel's home port

*If choice B is selected set score to 1.*

**65.** Number 3 lifeboat would be \_\_\_\_\_.

- (A) the forward boat on the starboard side
- (B) behind boat number 2 on the port side
- (C) behind boat number 1 on the starboard side
- (D) behind boat number 1 on the port side

*If choice C is selected set score to 1.*

**66.** To disengage a survival craft suspended from the cable above the water, you must pull the safety pin and \_\_\_\_\_.

- (A) pull the hook release handle and use the ratchet bar
- (B) pull the hook release handle
- (C) use the ratchet bar and depress the retainer
- (D) pull the hook release handle and depress the retainer

*If choice A is selected set score to 1.*

**67.** Inflatable liferafts shall be serviced at an approved servicing facility every 12 months or not later than the next vessel inspection for certification. However, the total elapsed time between servicing cannot exceed \_\_\_\_\_.

- (A) 12 months
- (B) 15 months
- (C) 17 months
- (D) 18 months

*If choice C is selected set score to 1.*

**68.** Limit switches, winches, falls, etc. must be thoroughly inspected at least every \_\_\_\_\_.

- (A) 2 months
- (B) 6 months
- (C) year
- (D) 4 months

*If choice C is selected set score to 1.*

**69.** What size bilge pump is required for a lifeboat which has a capacity of 675 cubic feet?

- (A) 1
- (B) 2
- (C) 3
- (D) 4

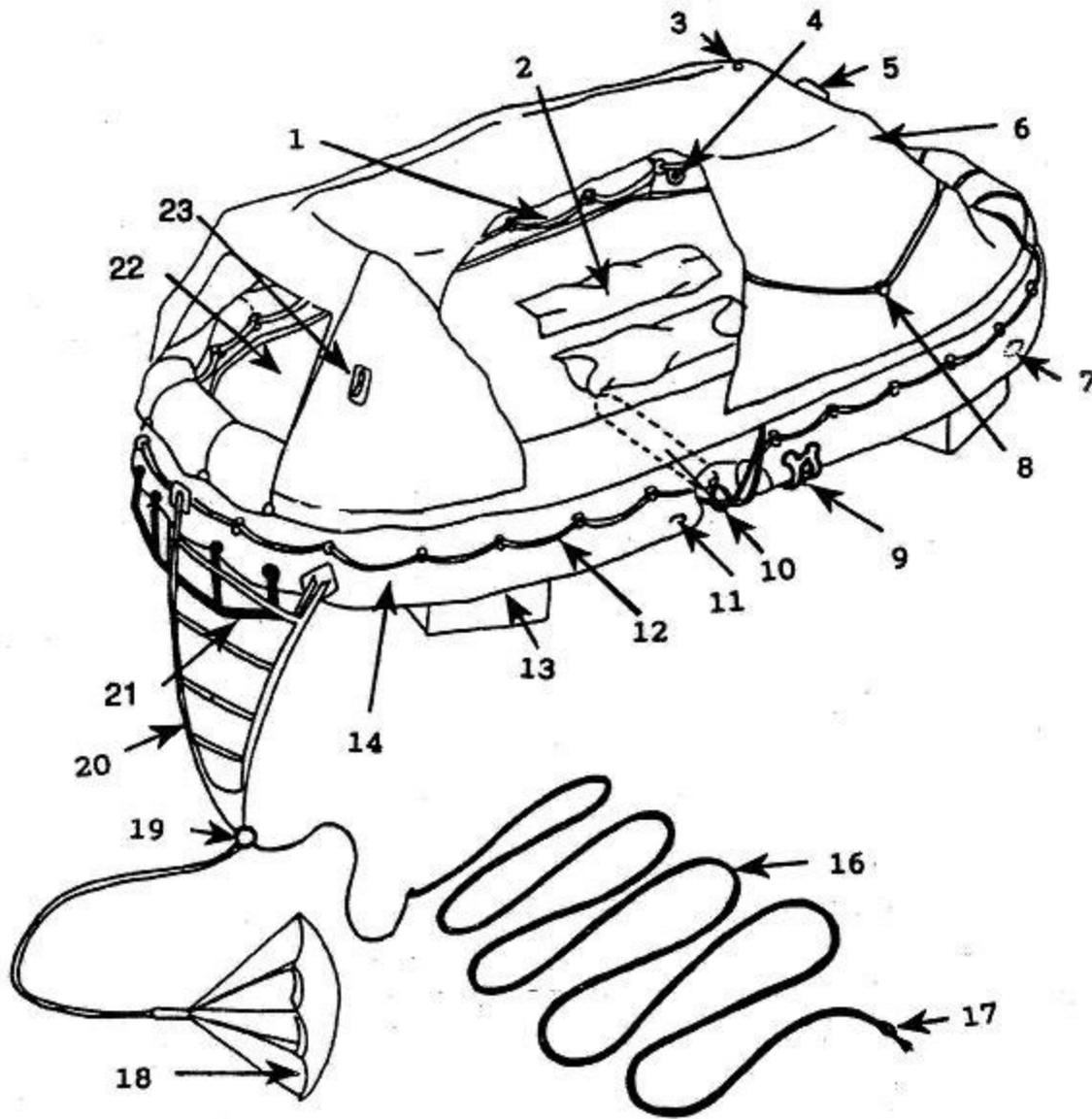
*If choice B is selected set score to 1.*

**70.** The breaking strength of the service lines of the rockets used with an impulse-projected, rocket type line throwing appliances is \_\_\_\_\_.

- (A) 300 lbs
- (B) 500 lbs
- (C) 1000 lbs
- (D) 1500 lbs

*If choice B is selected set score to 1.*

## D014SA



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## D033DG

