

U.S.C.G. Merchant Marine Exam

Mate Less than 500-1600 Gross Registered Tons

Q136 Deck General

(Sample Examination)

Choose the best answer to the following Multiple Choice Questions:

1. Your vessel is being assisted by an icebreaker. How should you indicate that you are ready to cast off the towline?
- (A) Sound five short blasts on his whistle
 - (B) Display code numeral "5"
 - (C) Sound one prolonged blast on the whistle
 - (D) Display code letter "Y" (Yankee)

If choice D is selected set score to 1.

2. Which U.S. agency assigns an official number to a vessel?
- (A) Coast Guard
 - (B) Treasury Department
 - (C) Collector of Customs
 - (D) American Bureau of Shipping

If choice A is selected set score to 1.

3. The most likely location for a liquid cargo fire to occur on a tanker would be _____.
- (A) in the pumproom
 - (B) at the main deck manifold
 - (C) in the midships house
 - (D) at the vent header

If choice A is selected set score to 1.

4. A tankerman who permits or causes oil to go into a navigable waterway may be federally punished with which of the following?
- (A) Imprisonment not to exceed 5 years
 - (B) Suspension or revocation of tankerman's document
 - (C) Fined in accordance with Title 18 U.S. Code
 - (D) All of the above

If choice D is selected set score to 1.

5. What is the name of the mark indicated by the letter A in illustration D003DG below?
- (A) Winter North Atlantic load line
 - (B) Deck line
 - (C) Plimsoll line
 - (D) Fresh Water load line

If choice B is selected set score to 1.

6. Which lashing gear used aboard Ro-Ro vessels should be painted or soaked in oil when not in use?

- (A) Chain
- (B) Wire rope.
- (C) Webbing
- (D) All of the above

If choice A is selected set score to 1.

7. What is NOT required as special safety equipment on a tankship carrying hazardous cargoes in bulk?

- (A) Two portable vapor detectors suitable for the cargoes carried
- (B) Shower and eyewash fountain
- (C) A safety locker adjacent to the emergency shutdown station
- (D) Equipment to lift an injured person from a pumproom

If choice A is selected set score to 1.

8. Which statement concerning a short splice is TRUE?

- (A) A short splice decreases the diameter of the line.
- (B) It is used to temporarily join two lines together.
- (C) A short splice is stronger than two lines joined by a knot.
- (D) None of the above

If choice C is selected set score to 1.

9. The transfer procedures required to be followed on tankships shall contain which item?

- (A) A list of each port of discharge
- (B) A line diagram of the vessel's transfer piping
- (C) The duties by name of each person in charge required for each transfer operation
- (D) A current crew list

If choice B is selected set score to 1.

10. Which term is given to the placing a lashing across a hook to prevent a fitting from slipping out of the hook?

- (A) Mousing
- (B) Flemishing down
- (C) Faking
- (D) Worming

If choice A is selected set score to 1.

11. Which space(s) is(are) NOT exempt when measuring gross tonnage?

- (A) Cargo holds
- (B) Galley in a deckhouse
- (C) Auxiliary machinery spaces above the deck
- (D) Steering gear room

If choice A is selected set score to 1.

12. Which part of a windlass physically engages the chain during hauling or paying out?

- (A) The devil's claw
- (B) The wildcat
- (C) The bull gear
- (D) The cat head

If choice B is selected set score to 1.

13. Which agency must approve the safety equipment on board inspected vessels?

- (A) The Safety Standards Bureau
- (B) The U.S. Coast Guard
- (C) The National Safety Council
- (D) The Occupational Safety and Health Administration (OSHA)

If choice B is selected set score to 1.

14. How should a vessel spotted at 45° relative be reported?

- (A) 4 points abaft the starboard beam
- (B) Broad on the starboard bow
- (C) On the starboard beam
- (D) 4 points forward of starboard bow

If choice B is selected set score to 1.

15. How should manila lines in which the strands are right-hand laid be coiled?

- (A) Manila line should be coiled in a counterclockwise direction
- (B) Manila line may be coiled either clockwise or counterclockwise
- (C) Manila line should never be coiled
- (D) Manila line should be coiled in a clockwise direction

If choice D is selected set score to 1.

16. Which of the signals listed is required to be displayed during the day while bunkering?

- (A) A red light
- (B) A yellow flag
- (C) A red flag
- (D) A red and yellow flag

If choice C is selected set score to 1.

17. Which spaces are required to be segregated from cargo tanks carrying grades A, B, C, or D cargoes?

- (A) Enclosed deck spaces
- (B) Pump rooms
- (C) Cofferdams
- (D) Navigation spaces

If choice D is selected set score to 1.

18. If you are bunkering and you close off one tank in the line of tanks being filled, what happens to the rate of flow to other open tanks on the same line?

- (A) The rate of flow decreases to the open tanks
- (B) The rate of flow stops to the open tanks
- (C) The rate of flow increases to the open tanks
- (D) The rate of flow remains constant to the open tanks

If choice C is selected set score to 1.

19. Annex V to MARPOL 73/78 contains requirements pertaining to the discharge into the marine environment of which item?

- (A) Garbage
- (B) Noxious liquid substances
- (C) Oil
- (D) Air pollutants

If choice A is selected set score to 1.

20. What is the period of validity of a Merchant Mariner Credential?

- (A) 5 years
- (B) 1 year
- (C) 3 years
- (D) 2 years

If choice A is selected set score to 1.

21. Your vessel (185 GT) is on a voyage between New York and San Francisco. Which statement is TRUE?

- (A) The vessel must be on foreign articles.
- (B) This is considered a coastwise voyage.
- (C) The maintenance of an Official Logbook is optional.
- (D) An Official Logbook must be maintained.

If choice D is selected set score to 1.

22. You are conducting trials to determine the maneuvering characteristics of your vessel. While making a turn, you take ranges and bearings of an isolated light. The results are shown in illustration D034DG below. What is the transfer for a turn of 90°?

- (A) 355 yards
- (B) 400 yards
- (C) 475 yards
- (D) 510 yards

If choice B is selected set score to 1.

23. Petroleum cargo tanks should not be topped off at deck level when loading on a cold day because _____.

- (A) air pockets may cause the cargo to bubble out of the ullage hole
- (B) the tank valve may be stiff and a spill will occur before the valve can be closed
- (C) a subsequent temperature rise will cause the cargo to overflow
- (D) the increased viscosity of the product requires higher loading pressure which increases the chances of a spill

If choice C is selected set score to 1.

24. 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) Decrease speed
- (B) Increase speed
- (C) Use more right rudder
- (D) Use more left rudder

If choice C is selected set score to 1.

25. A flammable liquid having a Reid vapor pressure of $8\frac{1}{2}$ P.S.I.A. or less and a flash point of 80°F or below is grade _____.

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

If choice C is selected set score to 1.

26. Camphor oil is classified as a _____.

- (A) Grade A flammable liquid
- (B) Grade C flammable liquid
- (C) Grade D combustible liquid
- (D) Grade E combustible liquid

If choice C is selected set score to 1.

27. Which vessel is NOT required to have a Pollution Placard posted on board?

- (A) 215-foot naval auxiliary vessel
- (B) 75-foot towing vessel
- (C) 50-foot cabin cruiser used for pleasure only
- (D) 150-foot unmanned tank barge

If choice A is selected set score to 1.

28. When the period of beam seas equals the natural rolling period of a vessel, what will most likely occur?

- (A) Excessive rolling
- (B) Excessive yawing
- (C) Excessive pitching
- (D) No change should be evident

If choice A is selected set score to 1.

29. Which is an exception to the garbage discharge requirements in Annex V to MARPOL 73/78?

- (A) Garbage accumulation on board has exceeded storage space.
- (B) The garbage to be discharged will sink.
- (C) The destination port or terminal cannot receive garbage.
- (D) A person falls overboard, and a plastic ice chest is thrown for flotation.

If choice D is selected set score to 1.

30. A flame screen _____.

- (A) permits vapors to exit but not enter a tank
- (B) permits the passage of vapor but not of flame
- (C) prevents inert gas from leaving a tank
- (D) prevents the passage of flammable vapors

If choice B is selected set score to 1.

31. In relation to the turning circle of a ship, which defines the term "transfer"?

- (A) The distance gained in the direction of the original course
- (B) The distance gained at right angles to the original course
- (C) The distance around the circumference of the turning circle
- (D) The distance the ship moves sideways from the original course away from the direction of the turn after the rudder is first put over

If choice B is selected set score to 1.

32. Which is TRUE concerning the official number of a documented vessel?

- (A) It is not required to be marked anywhere on the vessel
- (B) It is required to be permanently marked on the vessel's structure
- (C) It is required to be painted on the vessel's stern
- (D) It is required to be painted on the vessel's bow

If choice B is selected set score to 1.

33. Small floes of rough, hummocky sea ice are capable of damaging a vessel. Which statement is TRUE?

- (A) They can usually be detected by radar in a smooth sea at a range of 2 to 4 miles
- (B) The floes are invisible to radar when covered with a thick layer of snow
- (C) The floes are usually seen at night before they are close enough to provide a radar echo
- (D) They are indistinguishable from sea return on the PPI

If choice A is selected set score to 1.

34. 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
- (B) Arch the back to add strength to the muscles
- (C) Bend his back and stoop with arms straight
- (D) Bend his knees and lift with his legs

If choice D is selected set score to 1.

35. How many months after its expiration date may a Coast Guard credential be renewed without retaking the complete exam?

- (A) 1 month
- (B) 6 months
- (C) 12 months
- (D) 24 months

If choice C is selected set score to 1.

36. According to the Chemical Data Guide, what is the Reid Vapor Pressure of tert-butylamine?

- (A) 11 (psig)
- (B) 12 (psig)
- (C) 13 (psig)
- (D) 14 (psig)

If choice A is selected set score to 1.

37. Which document is NOT required by law to be posted aboard a vessel?

- (A) Muster List
- (B) Officer's licenses
- (C) Certificate of Inspection
- (D) Official Crew List

If choice D is selected set score to 1.

38. What is/are the advantage(s) of cranes over conventional cargo booms?

- (A) Increased safety because the deck is clear of running and standing rigging
- (B) Simplicity of operation of the crane by its operator
- (C) Cranes are able to pick up and drop loads over a greater spotting area
- (D) All of the above

If choice D is selected set score to 1.

39. Which is a method used to make an eye in a bight of line where it cannot be spliced?

- (A) Serving
- (B) Plaiting
- (C) Braiding
- (D) Seizing

If choice D is selected set score to 1.

40. Which variable factor affects the initial lashing requirements aboard Ro-Ro vessels?

- (A) Vessel's draft
- (B) Number, position and angle of lashings
- (C) ABS requirements
- (D) Port of origin

If choice B is selected set score to 1.

41. The official logbook is filed with the Officer in Charge, Marine Inspection. When does this action take place?

- (A) Upon completion of the voyage
- (B) Within 30 days of the date of arrival of the first U.S. port
- (C) At the end of the year with all other official logbooks
- (D) At the next Certificate of Inspection

If choice A is selected set score to 1.

42. Which is supplied to the vessel by the U.S. Coast Guard?

- (A) Rough Logbook
- (B) Bell book
- (C) Official Logbook
- (D) Cargo gear register

If choice C is selected set score to 1.

43. Which agency assigns Load lines for U.S. vessels?

- (A) The U.S. Coast Guard
- (B) The Lloyd's Register of Shipping
- (C) The American Bureau of Shipping
- (D) The National Cargo Bureau

If choice C is selected set score to 1.

44. You are conducting trials to determine the maneuvering characteristics of your vessel. While making a turn you take the ranges and bearings of an isolated light. The results are shown in illustration D034DG below. What is the transfer for a turn of 75°?

- (A) 365 yards (306 meters)
- (B) 320 yards (274 meters)
- (C) 230 yards (207 meters)
- (D) 190 yards (171 meters)

If choice B is selected set score to 1.

45. Your ship has loaded 6,000 barrels of gasoline, at a cargo temperature of 50°F, departing New Jersey bound for Florida. API gravity is 55°. The volume correction factor (VCF) is .0006. How many barrels would you expect to unload if the cargo temperature is 90°F at the discharge port?

- (A) 5,856
- (B) 5,982
- (C) 6,018
- (D) 6,144

If choice D is selected set score to 1.

46. Which type of ice is a hazard to navigation?

- (A) Frazil ice
- (B) Ice rind
- (C) Growlers
- (D) Pancake ice

If choice C is selected set score to 1.

47. Which indicates the holding capability of an anchor?

- (A) The size of the vessel and its draft
- (B) The stowage of the anchor on board
- (C) The shape of the anchor
- (D) The anchor's ability to dig in

If choice D is selected set score to 1.

48. Where are remote readouts for oxygen concentration, pressure, and temperature of an inert gas system required to be located?

- (A) Main deck and engine control consoles
- (B) Bridge and engine control consoles
- (C) Cargo control and engine control consoles
- (D) Bridge and tank(s) being inerted

If choice C is selected set score to 1.

49. Which is a precaution you should take before bunkering?

- (A) Close the lids on the vents
- (B) Plug the scuppers
- (C) Plug the sounding pipes
- (D) Plug the vents

If choice B is selected set score to 1.

- 50.** You are on a large merchant vessel entering a U.S. port. There is a Pilot on board and he has the conn. Which statement is TRUE?
- (A) The Pilot is solely responsible for the safe maneuvering of the ship only if he is required to be on board by law.
 - (B) The Pilot becomes solely responsible for the safe navigation of the vessel only if the Master relinquishes the conn.
 - (C) The Master is responsible for the safe navigation of the ship and the Pilot is employed for his local knowledge.
 - (D) The Pilot is solely responsible for the internal working of the ship.

If choice C is selected set score to 1.

- 51.** A marine chemist issues gas free certificates and is certified by which organization?
- (A) Mine Safety Appliance Association
 - (B) National Fire Protection Association
 - (C) American Chemical Society
 - (D) Marine Chemists Association

If choice B is selected set score to 1.

- 52.** The disadvantage(s) of using web lashing on light vehicles aboard Ro-Ro vessels is that it _____.
- (A) deteriorates in sunlight
 - (B) cuts on sharp edges
 - (C) is vulnerable to damage and pilferage
 - (D) All of the above

If choice D is selected set score to 1.

- 53.** Which defines the process of "Block stowage"?
- (A) Using port marks on the cargo
 - (B) To have the cargo on pallets
 - (C) Separation cloths to separate different kinds of cargo
 - (D) Stowing all the cargo for a port in the same area

If choice D is selected set score to 1.

- 54.** While discharging a tanker, how can the list be controlled?
- (A) By the shoreside personnel
 - (B) Using wing tanks near the longitudinal center, discharging as necessary
 - (C) Using the after peak tank, loading as necessary
 - (D) Using a center tank near the bow, discharging as necessary

If choice B is selected set score to 1.

55. You are heading into the sea during rough weather. What may happen if there is too much weight forward in your small boat?

- (A) The craft may plunge into the wave
- (B) The craft will rise rapidly over the wave
- (C) The craft will broach
- (D) The craft will list severely

If choice A is selected set score to 1.

56. When a vessel violates the oil pollution laws, who may be held responsible?

- (A) Credentialed officers only
- (B) Owners only
- (C) Master only
- (D) Any individual connected with the vessel involved in the operation

If choice D is selected set score to 1.

57. Severe exposure to chlorine gas can be fatal. Chlorine gas is primarily a _____.

- (A) nerve paralyzing irritant
- (B) respiratory irritant
- (C) blood poisoning agent
- (D) skin burning agent

If choice B is selected set score to 1.

58. You are arriving in port and are assigned to anchor in anchorage circle B-4. It has a diameter of 500 yards and your vessel's LOA is 484 feet. If you anchor in 8 fathoms at the center of the circle, what is the maximum number of shots of chain you can use and still remain in the circle?

- (A) 6 shots
- (B) 5 shots
- (C) 4 shots
- (D) 3 shots

If choice D is selected set score to 1.

59. How should cargo tank hatches be protected when the ullage opening is open and the tank NOT gas free?

- (A) With warning signs
- (B) With gooseneck vents
- (C) With pressure-vacuum relief valves
- (D) With flame screens

If choice D is selected set score to 1.

60. What is the total number of approved low-velocity water spray ("water-fog") applicators required aboard a tankship?

- (A) 4
- (B) 7
- (C) 10
- (D) 11

If choice B is selected set score to 1.

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

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

If choice B is selected set score to 1.

62. Which action should you take FIRST when preparing to hoist the anchor?

- (A) Put the brake in the off position
- (B) Take off the chain stopper
- (C) Raise riding pawl off of the chain
- (D) Lock in the wildcat

If choice D is selected set score to 1.

63. Which is the proper term used to describe a stream of water immediately surrounding a moving vessel's hull, flowing in the same direction as the vessel?

- (A) Wake current
- (B) Propeller current
- (C) Directional current
- (D) Forward current

If choice A is selected set score to 1.

64. Deck foam systems, designed to protect cargo areas on tank vessels built after January 1, 1975, must have a supply of foam-producing material to operate the system at its designed rate of foam production for _____.

- (A) 15 minutes without recharging
- (B) 20 minutes without recharging
- (C) 25 minutes without recharging
- (D) 30 minutes without recharging

If choice B is selected set score to 1.

65. Which statement about the use of portable electric lights in petroleum product tanks is TRUE?

- (A) They can be used only when the compartment is gas free.
- (B) The fixture must be explosion-proof and the line must have a ground wire.
- (C) They must be explosion-proof, self-contained, battery-fed lamps.
- (D) No portable electric equipment of any type is allowed.

If choice C is selected set score to 1.

66. Your tank barge requires repairs that include welding. Who normally would issue a gas-free certificate?

- (A) The ABS marine surveyor
- (B) Any Coast Guard marine inspector
- (C) The port engineer
- (D) A certified marine chemist

If choice D is selected set score to 1.

67. Keeping the draft at or below the load line mark will insure that the vessel has which of the following?

- (A) Reserve buoyancy
- (B) Adequate ballast
- (C) Normal rolling periods
- (D) Minimal displacement

If choice A is selected set score to 1.

68. The last 1.0 meter (3.3 feet) of vapor piping before the vessel vapor connection must be painted _____.

- (A) red/yellow/red
- (B) yellow/red/yellow
- (C) international orange
- (D) hi-visibility yellow

If choice A is selected set score to 1.

69. While on watch at sea you must maintain a proper lookout at all times. On a 700-foot cargo vessel being hand-steered during daylight hours in good visibility and clear of any navigational hazards, who may be the lookout?

- (A) The mate on watch
- (B) The helmsman
- (C) Either A or B
- (D) Neither A nor B

If choice A is selected set score to 1.

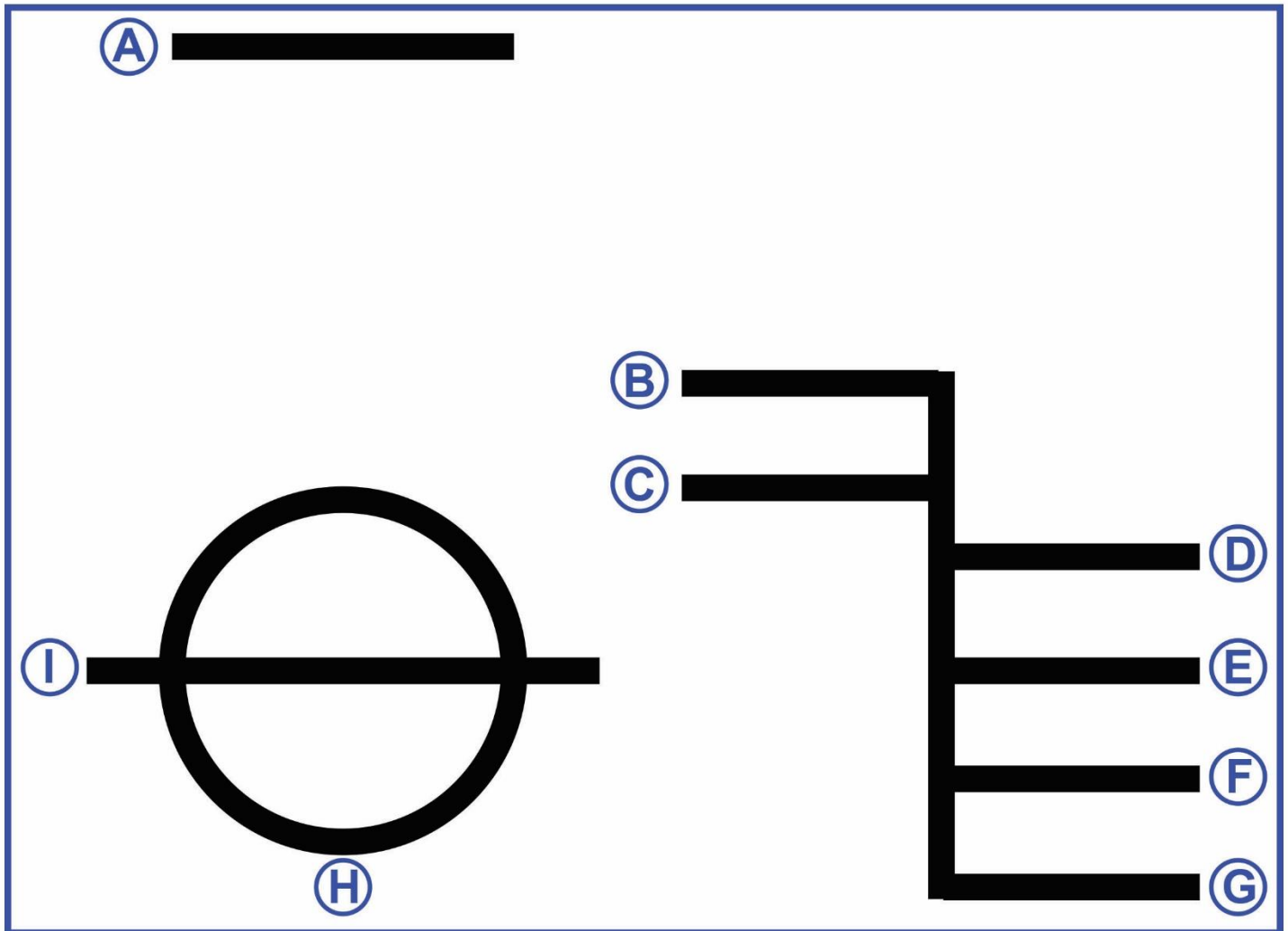
Q136 Deck General
U.S.C.G. Merchant Marine Exam
Mate Less than 500-1600 Gross Registered Tons
Illustrations: 2

70. What is an example of a grade A flammable liquid?

- (A) iso-Propylamine
- (B) Ethyl acetate
- (C) Morpholine
- (D) Acetone

If choice A is selected set score to 1.

D003DG



Adapted for testing purposes only from Rules for Building and Classing Steel Vessels, 2004,
Part 1, Conditions of Classification

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D034DG

HEADING (TRUE)	BEARING (TRUE)	RANGE (YDS)	REMARKS
228°			INITIAL HEADING
228°	232°	2260	ON INITIAL COURSE
228°	234°	1700	RIGHT FULL RUDDER ORDERED
230°	236°	1490	
252°	235°	1275	
275°	231°	1000	
316°	214°	850	
352°	198°	975	
022°	194°	1210	
053°	197°	1430	
087°	202°	1600	
115°	209°	1690	
151°	217°	1700	
183°	225°	1600	
218°	232°	1350	RUDDER AMIDSHIPS
228°	235°	1125	STEADY ON 228°