Exam simulation

Quiz BPL Hot Air - Balloon Pilot License - Flight Performance and Planning

QuizVds.it

STUDENT NAME:	DATE AND TIME:

01. Wake turbulence is particularly strong...

a) When flying at high speeds.

b) When flying at low altitudes.

c) When flying at low speeds.

d) When flying at high altitudes.

02. The term 'civil twilight' is defined as...

a) The period of time before sunrise or after sunset where the midpoint of the sun disk is 12 degrees or less below the true horizon

b) The period of time before sunrise or after sunset where the midpoint of the sun disk is 6 degrees or less below the apparent horizon.

c) The period of time before sunrise or after sunset where the midpoint of the sun disk is 6 degrees or less below the true horizon.

d) The period of time before sunrise or after sunset where the midpoint of the sun disk is 12 degrees or less below the apparent horizon.

03. An aircraft travels 100 km in 56 minutes. The ground speed (GS) equals...

a) 93 kt.

b) 198 kt.

c) 107 km/h.

d) 58 km/h.

04. The vertical extend of air with pressure changing by 1% with 80 m difference in height is referred to as ...

a) Inhomogene

b) Homogene

c) Unstable

d) Stable

05. Lower-than-standard temperature may lead to...

a) An altitude indication which is too high.

b) An altitude indication which is too low.

c) A correct altitude indication as long as the altimeter subscale is set to correct for non-standard temperature

d) A blockage of the Pitot tube by ice, freezing the altimeter indication to its present value.

06. An altitude of 4500 ft is transmitted as...

a) Four five zero zero

b) Four tousand five zero zero.

c) Four five tousand.

d) Four tousand five hundred.

07. When using a GPS for tracking to the next waypoint, a deviation indication is shown by a vertical bar and dots to the left and to the right of the bar. What statement describes the correct interpretation of the display?

a) The deviation of the bar from the center indicates the track error as absolute distance in NM; the scale for full deflection is +-10 NM

b) The deviation of the bar from the center indicates the track error as angular distance in degrees; the scale for full deflection depends on the operating mode of the GPS.

c) The deviation of the bar from the center indicates the track error as angular distance in degrees; the scale for full deflection is +-10°

d) The deviation of the bar from the center indicates the track error as absolute distance in NM; the scale for full deflection depends on the operating mode of the GPS.

08. A vertical speed indicator connected to a too big equalizing tank results in...

a) Indication too high

b) No indication

c) Indication too low

d) Mechanical overload

09. During a flight at FL 80, the altimeter setting has to be...

a) Local QFE

b) 1013.25 hPa

c) 1030.25 hPa

d) Local QNH.

10. What effect has an increase in air temperature inside the hull of a hot air balloon by a given difference in temperature?

a) The increase in load carrying capacity increases with height.

b) The increase in load carrying capacity decreases with height.

c) The increase in rate of climb increases with height.

d) The reduction in sink rate increases with height.

11. What is a latent error?

a) An error which has an immediate effect on the controls

b) An error which is made by the pilot actively and consciously

c) An error which remains undetected in the system for a long time

d) An error which only has consequences after landing

12. What is the meaning of the abbreviation "AIREP"?

a) What is the meaning of the abbreviation "AIREP"?

b) Aircraft report

c) Automatic identification report

d) Aeronautical information report

13. At which altitude is the atmospheric pressure approximately half the MSL value (1013 hPa)?

a) 5000 ft

b) 18000 ft

c) 22000 ft

d) 10000 ft

14. Point A on the Earth's surface lies exactly on the parallel of latitude of 47°50'27''N. Which point is exactly 240 NM north of A?

a) 53°50'27''N

b) 49°50'27''N

c) 43°50'27''N

d) 51°50'27'N'

15. From which altitude on does the body usually react to the decreasing atmospheric pressure?

a) 7000 feet
b) 12000 feet
c) 2000 feet
d) 10000 feet

16. Air consists of oxygen, nitrogen and other gases. What is the approximate percentage of other gases?

a) 1 %
b) 21 %
c) 0.1 %
d) 78 %

17. Which of the following messages has the highest priority?

a) Turn left
b) Request QDM
c) QNH 1013
d) Wind 300 degrees, 5 knots

18. Which are the official basic units for horizontal distances used in aeronautical navigation and their abbreviations?

a) Feet (ft), inches (in)
b) Yards (yd), meters (m)
c) Nautical miles (NM), kilometers (km)
d) Land miles (SM), sea miles (NM)

19. What is the great circle distance between two points A and B on the equator when the difference between the two associated meridians is exactly one degree of longitude?

a) 60 NM
b) 216 NM
c) 400 NM
d) 120 NM

20. In which situation is it NOT possible to achieve a pressure compensation between the middle ear and the environment?

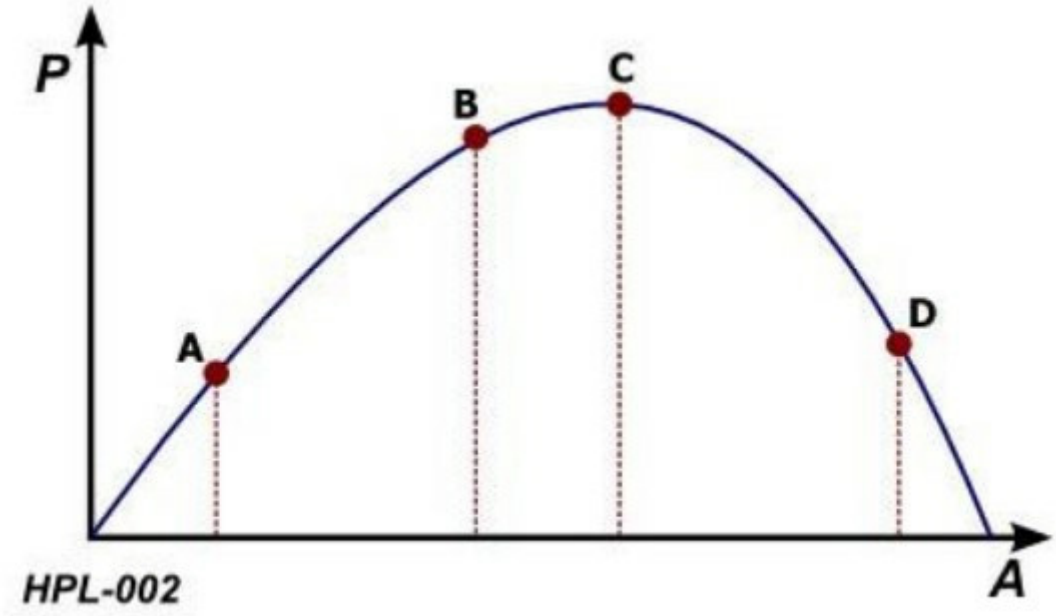
a) During a light and slow climb

b) Breathing takes place using the mouth only

c) The eustachien tube is blocked

d) All windows are completely closed

21. At which point in the diagram will a pilot find himself to be overstrained? See figure (HPL-002) P = Perfromance A = Arousal / Stress Siehe Anlage 1



a) Point B

b) Point D

c) Point C

d) Point A

22. What cloud type does the picture show? See figure (MET-004). Siehe Anlage 3

a) Cirrus
b) Altocumulus
c) Stratus
d) Cumulus

23. Regularity messages are messages...

a) Concerning aircraft and their passengers which face a grave and imminent threat and require immediate assistance.
b) Concerning the safety of an aircraft, a watercraft or some other vehicle or person in sight
c) Sent by an aircraft operating agency or an aircraft of immediate concern to an aircraft in flight
d) Concerning the operation or maintenance of facilities essential for the safety or regularity of aircraft operation.

24. The shortest distance between two points on Earth is represented by a part of...

a) A small circle.
b) A great circle.
c) A rhumb line
d) A parallel of latitude.

25. What has to be considered before a balloon ride across water surfaces?

a) Continuous radio communication has to be established with air traffice control
b) A transponder has to be installed and carried aboard
c) A flight plan with detailled routing has to be filed.
d) For all people inside the basket life jackets have to be carried aboard

26. Where are the two polar circles?

a) 23.5° north and south of the poles
b) 23.5° north and south of the equator
c) At a latitude of 20.5°S and 20.5°N
d) 20.5° south of the poles

27. A cross-country flight is made using the ICAO 1 : 500.000 aeronautical chart. An overflight crosscheck shows that a distance of 6 cm in the chart has been passed within 9 minutes. After how many more minutes, the overflight of another waypoint at a chart distance of additional 4 cm can be expected?

a) 18 min.
b) 6 min.
c) 12 min.
d) 9 min.

28. How does a gas react when released from a pressurized container?

a) The gas cools adiabatically due to expansion
b) The gas cools due to thermal contact with environmental air.
c) The gas heats adiabatically due to expansion.
d) The gas condenses inside the envelope.

29. The altimeter can be checked on the ground by setting...

a) QNE and checking that the indication shows zero on the ground.

b) QFF and comparing the indication with the airfield elevation.

c) QNH and comparing the indication with the airfield elevation.

d) QFE and comparing the indication with the airfield elevation.

30. Which of the following options are possible SSR-Transponder modes?

a) B, R, S

b) A, C, S

c) A, C, R

d) B, C, V

31. Why should a liquid gas bottle only be filled to 80% of its volume?

a) Because temperature would get too high.

b) Because it would get to heavy otherwise.

c) To provide space for temperature-induced expansion.

d) To provide space for expansion in case of external cooling

32. Which altitude marks the lower limit where the the body is unable to completely compensate the effects of the low atmospheric pressure?

a) 12000 feet

b) 7000 feet

c) 22000 feet

d) 5000 feet

33. During setup of a hot-air balloon, the hull is damaged with a hole with a size of 1.50 m x 1.00 m. Is Take-Off permitted?

a) Yes, if all passengers agree.

b) Yes, if permitted by the operating handbook.

c) No, the hull has to be repaired first.

d) Yes, if loading is reduced.

34. The pressure at MSL in ISA conditions is...

a) 1013.25 hPa.
b) 113.25 hPa.
c) 1123 hPa
d) 15 hPa.

35. What ist the purpose of the sounding pipe valve?

a) It allows pressure equalization during cruise at high altitude
b) To indicate the volumetric filling limit.
c) It prevents air from entering the burner system
d) For venting the liquid gas container bottle.

36. What is the correct designation of the frequency band from 118.000 to 136.975 MHz used for voice communication?

a) VHF
b) MF
c) LF
d) HF

37. What cause may result in a reduction of volume of a free balloon?

a) Reduction in mass
b) A gust
c) Cooling of environment air
d) Increase in hull temperature

38. What situation may result in the occurrence of severe wind shear?

a) When a shower is visible close to the airfield
b) Cross-country flying below Cu clouds with about 4 octas coverage
c) During final approach, 30 min after a heavy shower has passed the airfield
d) Flying ahead of a warm front with visible Ci clouds

39. A flight level is a...

a) True altitude
b) Density altitude.
c) Pressure altitude.
d) Altitude above ground.

40. With Central European Time (CET) given as UTC+1, what UTC time corresponds to 1700 CET?

a) 1600 UTC.
b) 1800 UTC
c) 1500 UTC.
d) 1700 UTC.

41. What is the purpose of the signal square at an aerodrome?

a) It is a specially marked area to pick up or drop towing objects
b) It is an illuminated area on which search and rescue and fire fighting vehicles are placed
c) It contains special symbols to indicate the conditions at the aerodrome visually to over-flying aircraft
d) Aircraft taxi to this square to get light signals for taxi and take-off clearance

42. Which area could be crossed with certain restrictions?

a) Restricted area
b) No-fly zone
c) Prohibited area
d) Dangerous area

43. The "swiss cheese model" can be used to explain the...

a) Optimal problem solution
b) State of readiness of a pilot
c) Procedure for an emergency landing
d) Error chain.

44. During buildup of a hot-air balloon, who has to be equipped with tight, flame resistant gloves and clothing covering all body parts?

a) Only the balloon pilot

b) Balloon pilot, buildup team and spectators

c) Only the buildup team

d) The balloon pilot and the buildup team

45. What cloud type does the picture show? See figure (MET-002). Siehe Anlage 2

a) Altus

b) Stratus

c) Cumulus

d) Cirrus

46. After take-off with a balloon, obstacles at a distance of 300 m erect in expected flight path up to 40 m height. Rate of climb is expected with 1.5 m/s. What maximum actual wind speed can be accepted to maintain a clearance of 50 m above obstacles, assuming double the actual wind speed for calculation?

a) 8 m/s

b) 2.5 m/s

c) 10 m/s

d) 1 m/s

47. A pilot burner which is fed by the gas phase, works by which principle?

a) Electrostatic principle.

b) Bunsen principle

c) Aerostatic principle.

d) Aerodynamic principle

48. What factor may affect the top of cumulus clouds?

a) The spread

b) Relative humidity

c) The absolute humidity

d) The presence of an inversion layer

49. What wind conditions can be expected in areas showing large distances between isobars?

a) Formation of local wind systems with strong prevailing westerly winds

b) Strong prevailing westerly winds with rapid veering

c) Variable winds, formation of local wind systems

d) Strong prevailing easterly winds with rapid backing

50. Which statement is correct with regard to the short-term memory?

a) It can store 5 (±2) items for 1 to 2 minutes

b) It can store 3 (±1) items for 5 to 10 seconds

c) It can store 7 (±2) items for 10 to 20 seconds

d) It can store 10 (±5) items for 30 to 60 seconds

51. What is the meaning of the phrase "Correction"?

a) Permission for proposed action is granted
b) An error has been made in this transmission. The correct version is...
c) I have received all of your last transmission
d) I understand your message and will comply with it

52. What is the distance between the two parallels of longitude 150°E and 151°E along the equator?

a) 60 NM
b) 60 km
c) 1 NM
d) 111 NM

53. During a flight in colder-than-ISA air the indicated altitude is...

a) Lower than the true altitude.
b) Higher than the true altitude
c) Equal to the standard altitude.
d) Eqal to the true altitude.

54. Which dangerous attitudes are often combined?

a) Impulsivity and carefulness
b) Macho and invulnerability
c) Self-abandonment and macho
d) Invulnerability and self-abandonment

55. What does a readability of 1 indicate?

a) The transmission is perfectly readable
b) The transmission is readable now and then
c) The transmission is readable but with difficulty
d) The transmission is unreadable

56. A risk factor for decompression sickness is...

a) Scuba diving prior to flight
b) 100 % oxygen after decompression.
c) Sports
d) Smoking.

57. What effect has air temperature on the carrying force and on maximum take-off mass of a balloon?

a) Maximum take-off mass is higher at low temperatures.
b) Maximum take-off mass is lower at low temperatures.
c) Carrying force is higher at low temperatures.
d) Carrying force is lower at low temperatures.

58. What is the meaning of the abbreviation "TRA"?

a) Temporary Radar Routing Area
b) Temporary Reserved Airspace
c) Terminal Area
d) Transponder Area

59. Wake turbulence is caused by...

a) Wind shear at the wingtip of an aerofoil.
b) Pressure compensation at the wingtip of an aerofoil.
c) Jet blast behind a turbine engine
d) Turbulence at the downwind side of a mountain range.

60. Under which conditions, no harzards should be expected for a balloon ride?

a) With high pressure areas before sunset
b) Close to showers or thunderstorms
c) With an warm front approaching
d) With an cold front approaching

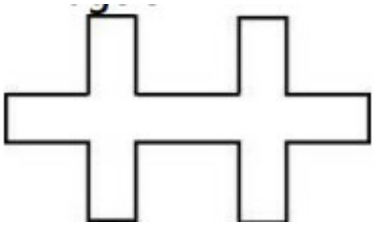
61. The majority of aviation accidents are caused by...

a) Human failure
b) Technical failure
c) Geographical influences.
d) Meteorological influences.

62. Doubling the pressure of a dry gas at constant temperature results in a change of the volume to:

a) Double the previous value.
b) Half the previous value.
c) Four times the previous value.
d) A quarter of the previous value.

63. What is the meaning of this sign at an aerodrome? See figure (ALW-011) Siehe Anlage 1



a) Landing prohibited for a longer period
b) Glider flying is in progress
c) After take-off and before landing all turns have to be made to the right
d) Caution, manoeuvring area is poor

64. Which of the following options states a correct position report?

a) DEABC over "N" in FL 2500 ft
b) DEABC over "N" at 35
c) DEABC, "N", 2500 ft
d) DEABC reaching "N"

65. What chart shows areas of precipitation?

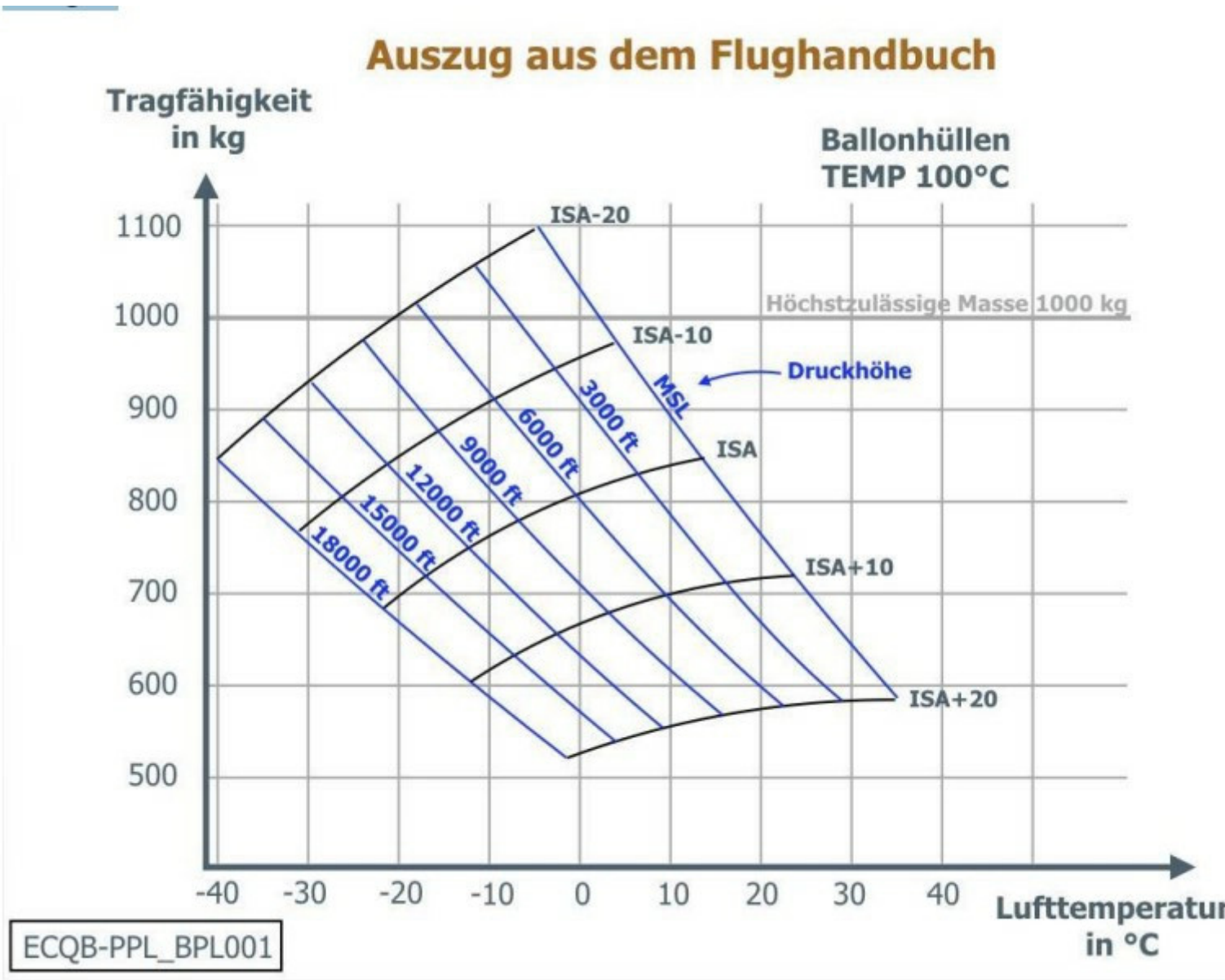
a) Radar picture

b) GAFOR

c) Wind chart

d) Satellite picture

66. Given the following masses: Empty mass 260 kg Instruments 20 kg per gas container (full): 30 kg per person: 80 kg Assuming ISA temperatures, how many persons may be carried in the basket at maximum, if the balloon with 4 gas containers has to climb up to pressure altitude 9.000 ft ? (use attachment ECQB-PPL_BPL001) Siehe Anlage 1



a) 4
b) 5
c) 2
d) 3

67. The Empty Mass of a gas balloon includes:

a) Ballast packages, basket, hull, valve and towing rope.
b) Basket, burner, ballast packages, hull, net and towing rope.
c) Basket, basket ring, Valve, net, hull and towing rope.
d) Burner, ballast packages, instruments, net and towing rope.

68. What weather conditions may be expected during conditionally unstable conditions?

a) Towering cumulus, isolated showers of rain or thunderstorms
b) Layered clouds up to high levels, prolonged rain or snow
c) Shallow cumulus clouds with base at medium levels
d) Sky clear of clouds, sunshine, low winds

69. The ongoing process to monitor the current flight situation is called...

a) Anticipatory check procedure.
b) Situational thinking.
c) Constant flight check.
d) Situational awareness.

70. Before buildup, the buildup team has to be informed about correct behaviour at sudden critical situations how?

a) Only at gusty winds
b) At least zwo days before
c) By the balloon pilot
d) Twice

Exam simulation

Quiz BPL Hot Air - Balloon Pilot License - Flight Performance and Planning

QuizVds.it

Response Scheme

Compare your answers with the following diagram and mark your score!

01: **C**	02: **C**	03: **C**	04: **B**
05: **A**	06: **D**	07: **D**	08: **A**
09: **B**	10: **B**	11: **C**	12: **B**
13: **B**	14: **D**	15: **A**	16: **A**
17: **B**	18: **C**	19: **A**	20: **C**
21: **B**	22: **A**	23: **D**	24: **B**
25: **D**	26: **A**	27: **B**	28: **A**
29: **C**	30: **B**	31: **C**	32: **A**
33: **B**	34: **A**	35: **B**	36: **A**
37: **B**	38: **A**	39: **C**	40: **A**
41: **C**	42: **A**	43: **C**	44: **D**
45: **C**	46: **B**	47: **B**	48: **D**
49: **C**	50: **C**	51: **B**	52: **A**
53: **B**	54: **B**	55: **D**	56: **A**
57: **B**	58: **B**	59: **B**	60: **A**
61: **A**	62: **B**	63: **B**	64: **C**
65: **A**	66: **A**	67: **C**	68: **A**
69: **D**	70: **C**		

Exam simulation

Quiz BPL Hot Air - Balloon Pilot License - Flight Performance and Planning

QuizVds.it

Response form

Use this form to mark your answers

01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	24:
25:	26:	27:	28:
29:	30:	31:	32:
33:	34:	35:	36:
37:	38:	39:	40:
41:	42:	43:	44:
45:	46:	47:	48:
49:	50:	51:	52:
53:	54:	55:	56:
57:	58:	59:	60:
61:	62:	63:	64:
65:	66:	67:	68:
69:	70:		