ADITYA COLLEGE OF COMPETITIVE EXAMS

Santhinagar, KAKINADA, Ph : 0884 2340236.

SSC MODEL

No. of Questions : 100 (1 - 100)

1. Which among the following words can be formed using the letters of the given word? PRESIDENTIAL

   1. TRADITION   2. SECULAR   3. LEADERS   4. NATIONAL

2. There are 6 boxes, A, B, C, D, E and F, which are kept one above the other but not necessarily in the same order. Box B is 3 boxes above box A. There is a gap of one box between box B and box E. Box D is immediately above box C but neither of them is below box A. How many boxes are below box F, if box E is not above box F?

   1. 3   2. 2   3. 1   4. 4

3. Three of the following four options are alike in a certain way based on the Alphabetical series. Which one among the following doesn't belong to the group?

   1. FQ   2. KV   3. CM   4. NY

4. If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?
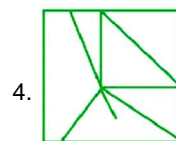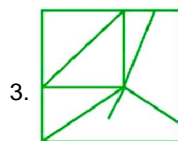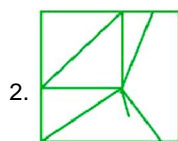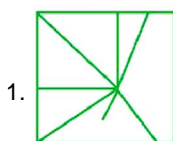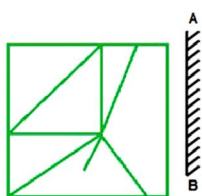
5. In a given coded language, how is the letter "M" coded?

   Statement I : In a certain coded language, "KSTM" is coded as "7326" and "AOKS" is coded as "8173"

   Statement II : In a certain coded language, "TKPM" is coded as "2746" and "MKDO" is coded as "8249"

   1. If the data given in statement I alone is sufficient to answer the question.

   2. If the data given in either statement I or statement II alone is sufficient to answer the

   3. If the data given in both statement I and statement II are sufficient to answer the question.

   4. If the data given in both statement I and statement II are not sufficient to answer the Solution

6. In the following question, select the missing letter from the series:

C	L	A	E
G	B	D	M
K	H	J	A
U	V	?	S

   1. U   2. Q   3. P   4. O

7. If PUNCTUAL is written as PCNUAUTL (where third and third last alphabet from left end doesn't change position), then which among the following can be written as HVAESIET?

   1. HAEVIEST   2. HEAVIEST   3. HEAVEIST   4. HVEAIEST

8. Sandhya walks from point A to point B in a straight line. Standing at point B, she turns 45° anti clock wise direction and walks straight to reach point C. Again standing at point C, she turns 315° clock wise direction and walk straight. Now she is moving towards south east direction. What is the direction of point B with respect to point A?

   1. South west   2. North east   3. North west   4. South east

9. If in a certain language, "HERITAGE" is coded as " > ? < + = * & ?" and "AMERICANS" is coded as " * $? < + # * @ !". How is "CHRISTMAS" coded in that code?

   1. # > + < ! = $ % !   2. # > < + ! = % $!   3. # > < + ! = $ * !   4. # > < + ! = $ % +

10. in the given question, three statements are given each followed by two conclusions I and II. You have to consider the statements to be true, even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

    Statements : Some circles are rectangles. No rectangle is square. Some squares are ovals.

    Conclusions :

    I. All circles may be squares.

    II. Some oval may be rectangles.

    1. Only conclusion I follows

    2. Neither conclusion I nor conclusion II follow

    3. Only conclusion II follows

    4. Both conclusion I and conclusion II follow

11. A Series is given with one term missing. Choose the correct alternatives from the given ones that will complete the series:

    SQTO, YWZU, ?, MKNI

    1. GEIC   2. GFHC   3. GEHD   4. GEHC

12. Which among the given operators should replace the "#" (in the same order) in the given expression below?

    13 # 5 # 6 # 2 # 6 # 5 # 19

    1. -, ÷, +, =, x, -   2. -, +, ÷, =, x, -   3. -, +, =, ÷, x, -   4. +, -, ÷, =, x, -

13. Which among the following set of letters can be placed in the gaps in the given alphabet series to follow a particular pattern?

    r q _ p o n _ m l _ q p _ o n _ m l _ q _ p o _ n _ l

    1. pnrpnrpnm   2. pnrpnprnm   3. pnrprnpnm   4. pnprnrpnm

14. A series is given with one two term missing. Choose the correct alternative from the give ones that will complete the series?

    9 12 19 32 ? ?

    1. 53, 81   2. 52, 85   3. 53, 84   4. 50, 84

15. In a certain coded language, 'SECULAR' is written as '3125479' and 'STRIKE' is written as '309681'. How is 'CRITICISE' written in that code language?

    1. 296066231   2. 296062631   3. 296602631   4. 290662631

16. Select the related number from the given alternatives:

    9 : 28 : : 12 : ?

    1. 39   2. 42   3. 40   4. 44

17. Point A is 5m north of point B, which is 8m east of point C. Point E is 9m south of point F, which is 8m east of point G. Point H is 9m south of point G. Point D is 9m north of point C. What is the distance between point D and point E if point E is 5m west of point A?

    1. $5\sqrt{2}$ m   2. 5m   3. $4\sqrt{2}$ m   4. $5\sqrt{3}$ m

18. Six persons A, B, C, D, E, and F sit in a straight row facing north but not necessarily in the same order. How many persons sit between B and D?

    Statement I : D sits 3rd to the right of C. F sits 2nd to the right of E. B sits 2nd to the left of A, who is the neighbor of E.

    Statement II : 2 persons sit between B and E. A sits immediate right of C, who is the neighbor of B. F sits 2nd to the right of E.

    1. If the data given in statement I alone is sufficient to answer the question.

    2. If the data given in both statement I and statement II are sufficient to answer the question.

    3. If the data given in either statement I or statement II alone is sufficient to answer the question.

    4. If the data given in statement II alone is sufficient to answer the question.

19. Select the related letters from the given alternatives:

    FJNB : OPRD :: ? : MXKG
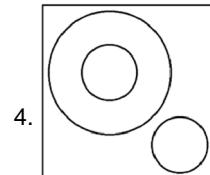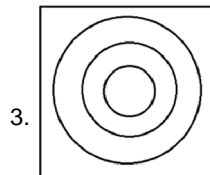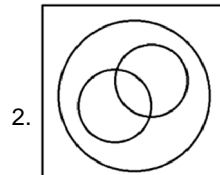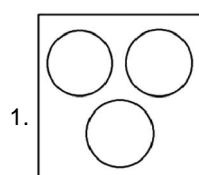
    1. DRGF   2. DRHE   3. DSGE   4. DRGE

20. Identify the diagram that best represents the relationship among the given classes:

    Planet, Moon, Milky way

21. Find out the odd word/letter/number pair from the given alternatives.

    1. Mars　　　　　　　　2. Sun　　　　　　　　3. Saturn　　　　　　　　4. Mercury

22. Pointing to a man, Manish said, "His father is the husband of my father's mother's daughter in law". How is the father of man related to Manish's father?

    1. Brother　　　　　　　2. Brother in law　　　　3. Son in law　　　　4. Can't be determined

23. Find the odd one from the following:

    1. 515, 8　　　　　　　2. 219, 6　　　　　　　3. 1334, 11　　　　　　4. 347, 7

24. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-1 are numbered from 1 to 4 and that of Matrix-II are numbered from 5 to 8. A letter from these matrices can be represented first by its row and next by its column, for example, 'A' can be represented as '58', and 'B' can be represented by '22', '87'. Similarly, you have to identify the set for the word 'PUBLIC'.

	1	2	3	4
1	R	C	I	M
2	E	B	W	V
3	S	C	E	F
4	P	D	U	W

	5	6	7	8
5	K	S	U	A
6	D	R	N	0
7	G	J	L	R
8	E	U	B	D

1. 41, 57, 87, 77, 13, 32　　2. 41, 43, 22, 77, 13, 23　3. 41, 22, 43, 77, 31, 32　4. 41,57,78,77,13,32

25. If a mirror is placed on the line PQ. then which of the answer figures is the right image of the given figure?
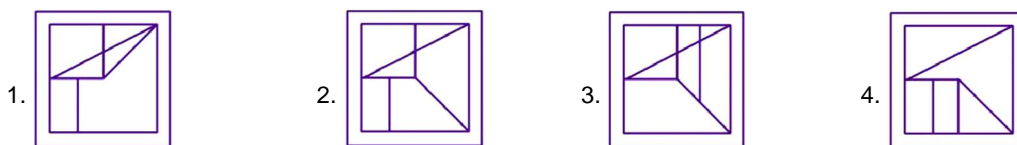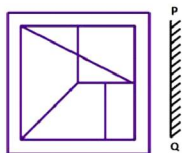
26. "Pyridoxine" is chemical name of which vitamin?

    1. Vitamin C　　　　　　2. Vitamin B2　　　　　3. Vitamin B6　　　　　4. Vitamin B12

27. The First Law of Thermodynamics states that heat is a form of energy so thermodynamic processes are therefore subject to which principle?

    1. Conservation of Charge　　　　　　　　2. Conservation of Mass

    3.Conservation of Momentum　　　　　　　4. Conservation of Energy

28. Which of the following statement is correct about Carnot's engine?

    1. A reversible heat engine operating at maximum efficiency

    2. A reversible refrigeration device operating at maximum efficiency

    3. An irreversible heat engine operating at maximum efficiency

    4. A reversible heat engine operating at minimum efficiency

29. 'National Physical Laboratory of India' is located at which place?

    1. New Delhi　　　　　　2. Mumbai　　　　　　3. Chennai　　　　　　4. Pune

30. Which of these is known as 'God Particle'?

    1. Pi-Meson　　　　　　2. Neutrinos　　　　　　3. Mesons　　　　　　4. Higgs Boson

31. Who got Nobel Prize for discovery related to "Photo Electric Effect"?
   1. Max Plank   2. Marconi   3. Albert Einstein   4. John Dalton

32. What is the approximate height of geo-stationary satellites from the surface of the earth?
   1. 25000 km   2. 36000 km   3. 27000 km   4. 56000 km

33. What do you understand by term "Gerontology"?
   1. Study of Blood   2. Study of Ageing   3. Study of Insects   4. Study of Liver

34. What is the ratio of change in configuration to the original configuration called as?
   1. Elasticity   2. Strain   3. Stress   4. Momentum

35. "BIOS" stands for_____.
   1. Basic Input Output System   2. Basic Inner Outer Services
   3. Better Input Output Services   4. Better Inner and Outer System

36. Which is the effect of increase in the temperature on the surface tension of the liquid?
   1. It increases   2. It decreases   3. It remains the same   4. None of the above

37. What do we call the mode of transmission of heat by which heat travels from one part of a body to another by the actual motion of the heated particles of the body?
   1. Convection   2. Conduction   3. Radiation   4. None of the above

38. Hargobind Khorana's work relates to which of the following?
   1. Synthesis of simple DNA   2. Understanding the genetic code
   3. Reduction of mutation   4. Synthesis of RNA from bacterial cell

39. The cloudless day-time sky appears blue because of which phenomenon?
   1. Reflection on Sea Water   2. Atmospheric Water Vapour
   3. Scattering of Light   4. Emission of Blue Wavelength by the Sun

40. What part of the Quinine plant is commonly used drug for Malaria?
   1. Leaves   2. Fruits   3. Root   4. Bark

41. Name the largest part of the Alimentary canal?
   1. Large Intestine   2. Small Intestine   3. Liver   4. Stomach

42. Name the process in which the passage of water goes from a region of higher concentration to a region of lower concentration through a semi permeable membrane?
   1. Diffusion   2. Osmosis   3. Both (1) and (2)   4. None of these

43. Respiration in Plants takes place through which of the following part?
   1. Stomata   2. Lenticels   3. Both (1) and (2)   4. None of these

44. What is the process of taking food into the body called?
   1. Digestion   2. Assimilation   3. Ingestion   4. Egestion

45. When the cut stems of two different plants are joined together in such a way that the two stems join and grow as a single plant, it is called____.
   1. Cutting   2. Layering   3. Grafting   4. Shifting

46. Which of the following organism have parasitic mode of nutrition?
   1. Penicillium   2. Plasmodium   3. Paramecium   4. Parrot

47. Which of the following in biology is the energy currency of cells?
   1. PDP   2. DTP   3. ATP   4. ADP

48. A substance that slows down chemical reaction is called
   1. Inhibitor   2. Ketone   3. Moderator   4. Catalyst

49. Which one of the following is also known as "Wood Spirit"?
   1. Ethyl Alcohol   2. Ethylene Alcohol   3. Methyl Alcohol   4. Glycerol

50. Which one of the following acids is used in the manufacturing of baking powder?
   1. Oxalic Acid   2. Lactic Acid   3. Tartaric Acid   4. Benzoic Acid

51. By which technique salt is obtained from sea-water?
   1. Filtration   2. Distillation   3. Evaporation   4. Chromatography

52. Name a gas which is used in making chloroform?
   1. Methane   2. Propane   3. Butane   4. Acetylene

53. What is the full form of ASCII?

1. American Standard Characters for Information Interchange

2. American Style Code for Information Interchange   3. American Standard Code for Input Interchange

4. American Standard Code for Information Interchange

54. Which national park is famous for Great Indian one Horned Rhino?

1. Raja ji National Park   2. Jim Corbet National Park

3. Bandipur National Park   4. Kaziranga National Park

55. Name the natural vegitation which has grown naturally without human aid and has been left undisturbed by humans for a long time?

1. Endemic vegetation   2. Virgin vegetation   3. Natural vegetation   4. Desert vegetation

56. From which Indian state did the Alvar saints originate?

1. Kerala   2. Karnataka   3. Maharashtra   4. Tamil Nadu

57. In which of the following hill range is "Dodabeta" peak situated?

1. Aravalli Hills   2. Anaimalai Hills   3. Cardamom Hills   4. Nilgiri Hills

58. Which one of the following is most widespread and most productive category of soil in India?

1. Black Soil   2. Laterite Soil   3. Red Soil   4. Alluvial Soil

59. 'Bannerghatta National Park' is located in which state of India?

1. Maharashtra   2. Tamil Nadu   3. Kerala   4. Karnataka

60. The "Saka Era" commencing from A.D. 78 was founded by which ruler?

1. Kanishka   2. Asoka   3. Chandragupta   4. Vikramaditya

61. Godavari river originates from which state of India?

1. Madhya Pradesh   2. Karnataka   3. Maharashtra   4. Gujarat

62. Money bill can be introduced in the state legislature only on the recommendation of__

1. Speaker   2. Finance Minister   3. Chief Minister   4. Governor

63. Brabourne Stadium is located in which state?

1. West Bengal   2. Tamil Nadu   3. Karnataka   4. Maharashtra

64. "Annual Financial Statement" is mentioned in which Article of Indian Constitution?

1. Article 108   2. Article 112   3. Article 79   4. Article 215

65. Which features of Indian Constitution resembles with 'Instrument of Instructions' enumerated in the Government of India Act of 1935?

1. Fundamental Rights   2. Directive Principles   3. Fundamental Duties   4. Preamble

66. 'National Science Day' is observed on 28th February in India. What is the theme for 2019?

1. Science for the People and the People for Science

2. Maintaining balance between Science and Nature

3. Science and Fourth Industrial Revolution   4. Science and Sustainable Development for People

67. Union Railway Minister Piyush Goyal has recently announced a new railway zone, 'Southern Coast Railway', which will be headquartered at

1. Guntur   2. Hyderabad   3. Bengaluru   4. Visakhapatnam

68. 'Hand-in-Hand' joint military exercise was recently conducted by India with which country?

1. Japan   2. China   3. Germany   4. France

69. 'Pradhan Mantri Fasal Bima Yojana' was launched to provide insurance coverage to the farmers in the event of crop failure. What is the rate of premium for Rabi Crops?

1. 2%   2. 1.5%   3. 2.5%   4. 5%

70. Which of the following city is capital of Jordan?

1. Amman   2. Rabat   3. Istanbul   4. Tashkent

71. Out of a total of 85 children playing Badminton or Table Tennis or both, total number of girls in the group is 70% of the total number of boys in the group, the number of boys playing only Badminton is 50% of the number of boys and total number of boys playing Badminton is 60% of the total number of boys. Number of children only playing table Tennis is 40% of the total number of children and a total of 12 children play both Badminton and Table Tennis. What is the number of girls playing only Badminton ?

1. 16   2. 14   3. 14   4. None of these

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72. Find the curved surface area of a hemisphere whose radius is same as the side of a cube of volume is 512 cm³.

[Take $\Pi = 3$]

1. 384 cm²   2. 412 cm²   3. 356 cm²   4. 442 cm²

73. The HCF and LCM of two positive numbers are 13 and 225, respectively. If two numbers are in the ratio of 9:13, then find the smaller number.

1. 36   2. 45   3. 54   4. 63

74. The efficiency of machine A is 60% more than that of machine B, while the efficiency of machine B is 80% of machine C. By how much percentage machine A is more efficient than machine C?

1. 24%   2. 36%   3. 32%   4. 28%

75. For what value of p, the pair of equations, 2x + 5y = 12 and px + 10y = 24 will not have a unique solution?

1. 2   2. 8   3. 4   4. -4

76. If $x = \sqrt{2} + 1$ and $y = \sqrt{2} - 1$, then find the value of $(x^2 - y^2 - 4\sqrt{2})$.

1. 0   2. 1   3. -1   4. $\sqrt{2}$

77. If the average of 5 consecutive integers starting from A is 'p', then what would be the average of 7 consecutive integers starting from (A + 2)?

1. p + 5   2. p + 2   3. p + 7   4. p + 3

78. Abhishek lent Rs.4800 and Rs. 5500 to Raj and Piyush, respectively at the same rate of simple interest for 3 years. If he earned an interest of Rs. 273 more from Piyush than Raj, then find the rate of interest.

1. 11%   2. 12%   3. 13%   4. 14%

79. Suresh stares at the top of building of height 24 m with an angle of elevation of 30°. If the height of Suresh is 2 m, then find the horizontal distance between Suresh and the building.

1. 24 m   2. 22 m   3. $22\sqrt{3}$ m   4. $24\sqrt{3}$ m

80. Arjun bought a video game for Rs. 4400 and sold it to Karan at a discount of 25%. If Arjun made a profit of 20% in this deal, then find the marked price of the video game.

1. Rs. 6600   2. Rs. 6840   3. Rs. 7040   4. Rs. 7120

81. How many times do the hands of clock coincide in a day ?

1. 11   2. 22   3. 12   4. 24

82. In the given figure, AB || CD and CD is the diameter of the circle. Find the value of 'x'.
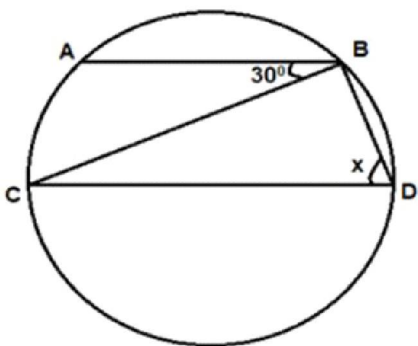
1.- 80°   2. 30°   3 60°   4. 0°

83. A container contains 45 litres of mixture of two liquids A and B in the respective ratio of 5:4. How much of liquid B must be added in the mixture such that quantity of liquid B becomes twice the quantity of liquid A in the resultant mixture?

1. 15 litres   2. 20 litres   3. 25 litres   4. 30 litres

Directions (84 - 86) : Answer th e questions based on the in form atio n given below.

The table below represent the number of Bollywood movies released in different years, and the percentage of flop movies in the respective year.

Note : Number of movies released in any year = Number of flop movies + number of hit movies.

Year	Number of movies released	Percentage of flop movies
2012	480	20%
2013	500	42%
2014	240	25%
2015	280	30%

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84. Find the average number of movies released in each of the given years
    1. 375   2. 360   3. 385   4. 390

85. Find the number of hit movies in the year 2015.
    1. 202   2. 172   3. 184   4. 196

86. Find the number of flop movies in the year 2012 and 2014 together.
    1. 144   2. 156   3. 168   4. 172

87. The time taken by a boat to cover 44 km downstream is same as the time taken by the boat to cover 33 km upstream. If the speed of stream is 4 km/hr, then find the speed of boat in still water.
    1. 24 km/h   2. 26 km/h   3. 28 km/h   4. 30 km/h

88. In a village three peopel contested for the post of village Pradhan. Due to their own interest, all the voters voted and no one vote was invalid. The losing candidate (3rd position) got 30% votes. What could be the minimum absolute margin of votes by which the winning candidate led by the nearest rival, if each candidate got an integral per cent of votes ?
    1. 4   2. 2   3. 1   4. None of these

89. A can do 60% of work in 24 days, while B can complete the work in 50 days. Find the time taken by both of them to complete 45% of the work.
    1. 9 days   2. 10 days   3. 12 days   4. 15 days

90. Simplify : $[\{(2176 \div 8) \div 4\} - 4]^{1/2}$
    1. 6   2. 7   3. 8   4. 9

91. Four years ago, the age of A and B were in the ratio of 2:3. If the age of B after 7 years will be 35 years, then find the present age of A.
    1. 18 years   2. 20 years   3. 21 years   4. 24 years

92. The monthly income of Pankaj and Rajan is in the ratio of 4:5, respectively. If the monthly savings of Pankaj is Rs. 4000 less than the monthly savings of Rajan. If the expenditure of Pankaj and Rajan is Rs. 16000 and Rs. 18000, respectively, then find the income of Rajan.
    1. Rs. 28000   2. Rs. 36000   3. Rs. 24000   4. Rs. 30000

93. A village has a population of 2650 with 40% female population. If 60% of the male population are eligible for voting, then find the number of males who are not eligible for voting in the village.
    1. 612   2. 636   3. 656   4. 672

94. The respective ratio of silver to tin in alloy A is 2:5, while in alloy B the respective ratio of silver to tin is 3:4. Both alloys are mixed to form alloy C. If the respective ratio of silver to tin in alloy C is 2:3, then find the ratio of tin present in alloy A to the tin present in alloy B.
    1. 5 : 16   2. 5 : 8   3. 5 : 4   4. 4 : 7

95. Find the compound interest earned on a sum of Rs. 24000 at the rate of 20% p.a. after 3
    1. Rs. 17472   2. Rs. 16488   3. Rs. 17896   4. Rs. 18020

96. A man sold an article at 25% profit. Had he sold the same article at a profit of 40%, he would have earned Rs. 900 more. Find the cost price of the article.
    1. Rs. 4800   2. Rs. 5400   3. Rs. 6000   4. Rs. 6600

97. If $x = 2\sqrt{5}$ and $y = \sqrt{5}$, find the value of $x^4 + 2x^3y - 4xy^3 - x^2y^2 + 15x^2 - 10xy - 500$
    1. 200   2. -100   3. 100   4. 300

98. In the following figure, find Y.
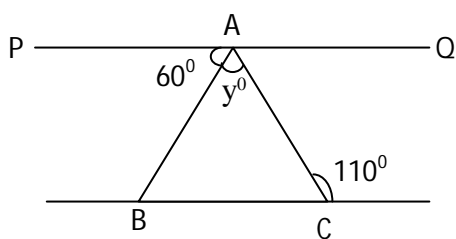
    1. 70^0 2. 60^0 3. 50^0 4. 80^0

99. If $x^3 - y^3 = 26$, and $x - y = 2$, then find the value of xy.
    1. 2   2. 3   3. 4   4. 5

100. Find the value of $\{\tan x + \tan(\Pi + x) + \tan(\Pi - x) + \sec \Pi\}$.
    1. tan x -1   2. -1   3. 1 - cot x   4. tan x + sec x

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SSC TEST   **27 / 2021**   **KEY SHEET**

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 - 20	3	2	3	4	3	4	3	1	3	3	4	2	1	3	2	3	2	1	4	1
21 - 40	2	4	4	1	2	3	4	1	1	4	3	2	2	2	1	2	1	2	3	4
41 - 60	2	1	3	3	3	2	3	1	3	3	3	1	4	4	2	4	4	4	4	1
61 - 80	3	4	4	2	2	1	4	2	2	1	2,3	1	2	4	3	1	4	3	3	3
81 - 100	2	3	4	1	4	2	3	2	2	3	2	4	2	1	1	3	1	3	2	1

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