Previous Year Topic-wise SSC CGL 2022

Smart Practice Question Series



MATHEMATICS

Chapter 5 : Ratio and Proportion



- Asian Online Smart Practice What is the ratio of the mean proportional between 1.6 and 3.6 and the third proportional of 5 and 1. 8?
 - Α. 2:15
 - 5:16 B.
 - **C**. 3:16
 - 4:15D.

MATHEMATICS SSC CGL 1 Dec Shift-2 **Ratio and Proportion** ONLINE 11:45 AM - 12:45 PM Tier-1

The table given below shows the number of persons participating in a survey from 6 different 2. states.

What is the ratio of number of person participating in a survey from state S3 to the number of Asian Online Smart person participating in a survey from state S4?

- A. 3:5
- 5:4 B.
- C. 4:3
- D. 4:5

States	Persons				
S1	100				
S2	200 400 500 600 800				
S 3					
S4					
S5					
S6					



- A container contains 25 litre of milk. From this container, 5 litre of milk is taken out and replaced 3. Asian Online Smart Prav by water. This process is further repeated two times. How much milk is there in the container now?
 - 11.5 litre Α.
 - Β. 14.8 litre
 - 13.5 litre С.
 - 12.8 litre D.



- The ratio of expenditure to savings of a woman is 5:1. If her income and expenditure are increased 4. Asian Online Smart Prata by 10% and 20%, respectively, then find the percentage change in her savings.
 - Α. 55%
 - 60% Β.
 - С. 50%
 - D. 40%



- can it run Asian Online Smart Practice A truck runs 492 km on 36 Litter of diesel. How many kilometres can it run on 33 Litter of diesel? 5.
 - 454 km Α.
 - Β. 453 km
 - 451 km С.
 - D. 452 km



- ater. How Asian Online Smart Practice A mixture of milk and water measures 60 litres. It contains 10% water. How much water should 6. be added to it, so that the water may be 25%?
 - Α. 18 litres
 - 14 litres Β.
 - С. 16 litres
 - D. 12 litres



- By mistake, instead of dividing ₹ 702 among Ram, Ramesh, and Naresh in the ratio $\frac{1}{3}:\frac{1}{4}:\frac{1}{6}$, it was 7. y how n. Asian Online Smart divided in the ratio of 3 : 4 : 6 who gained the most and by how much?
 - Ram ₹158 Α.
 - Ramesh ₹158 Β.
 - Naresh ₹168 С.
 - Ram ₹168 D.



- Asian Online Smart Practice A, B, C and D share a property worth Rs.93,100. If A : B = 1 : 2, B : C = 3 : 4 and C : D = 5 : 6, 8. then find the share of C.
 - Rs.34,000 A.
 - Rs.28,000 B.
 - Rs.25,000 **C**.
 - Rs.31,000 D.



- Asian Online Smart Practice What is the ratio of the fourth proportional of 2, 5, 6 and the fourth proportional of 6, 8, 9? 9.
 - A. 3:2
 - B. 5:3
 - C. 3:4
 - D. 5:4



- 10. The number of books on Mathematics, Physics and Chemistry in a University library is in the ratio 8:5:9. There is a proposal to increase these books by 10%, 5% and 5% respectively. What will be the ratio of the number of books after increment? Asian Online Smart 57
 - Α. 212:117:47
 - 37:47:83 Β.
 - 176 : 105 : 189 С.
 - 189:115:117 D.



- Asian Online Smart Practice 11. Ratio between the present ages of A and B is 2 : 3, respectively. After 5 years, the ratio between their ages will be 3 : 4. What is B's age at present?
 - 20 years A.
 - B. 15 years
 - 10 years **C**.
 - 25 years D.



- 12. If a : b = c : d, then which of the following ratio is equal to a : c?
 - a : d A.
 - B. b:c
 - С. a+d:b+c
 - D. a+b:c+d

MATHEMATICS 3 Dec, 2022 SSC CGL **Ratio and Proportion** ONLINE Shift-2 (11:45 AM -Tier-1 <u>12:45 PM)</u>

- 13. Find the mean proportion between $(6 + \sqrt{8})$ and $(3 \sqrt{2})$
 - A. $2\sqrt{12}$
 - $\sqrt{14}$ B.
 - C. $(6 \sqrt{8})$
 - D. $\sqrt{15} 7$



- JI 9 and 13. Asian Online Smart Practice 14. Which smallest positive number should be subtracted from each of 9 and 13 so that 18 is the third proportion to them?
 - A. 2
 - B. 4
 - **C**. 3
 - D. 1

MATHEMATICS 3 Dec, 2022 SSC CGL **Ratio and Proportion** ONLINE Shift-4 (5:15 PM -Tier-1 6:15 PM) Asian Online Smart Practice 15. The tax on the salary of X is $\frac{1}{4}$ of the salary and saving are $\frac{1}{3}$ of the salary. The ratio of the expenditures to the savings is . A. 4:5 **B**. 4:3 C. 5:4 D. 3:4



- rears the ractice smart Practice Asian Online Smart Practice 16. The ratio of the present ages of Ram and Ramesh is 3 : 5. After 7 years the ratio of their ages will be 4 : 5. Find the present age of Ramesh.
 - 5 years A.
 - Β. 15 years
 - **C**. 7 years
 - D. 12 years



17. A varies directly as the positive square root of B, and inversely as the cube of C. If A = 15, when B = 27 and C = 2, then find B when A = 9 and C = 2. A. $\frac{281}{42}$ B. $\frac{243}{25}$ C. $\frac{264}{37}$ D. $\frac{275}{51}$



- Luportion to Asian Online Smart Practice 18. The fourth proportion to 12, 24 and 27 is the same as the third proportion to A and 36. What is the value of A?
 - A. 22
 - B. 24
 - С. 26
 - D. 20



- ratio become. Practice Asian Online Smart Practice 19. Two numbers are in the ratio of 5 : 7. If 6 be added to each, the ratio becomes 3 : 4. Find the numbers.
 - A. 30, 42
 - 55,88 B.
 - С. 10, 16
 - 25, 40D.



Lional of a2 c Asian Online Smart Practice 20. The mean proportional of a and b is c. What is the mean proportional of a2 c and b2 c?

- A. C
- 3C B.
- C. C^3
- D. C^2



- anue of x is: Asian Online Smart Practice 21. If x is the mean proportional between 12.8 and 64.8, then the value of x is:
 - 32 A.
 - 34 Β.
 - **C**. 28.8
 - D. 26.4





- 23. Rohan scored twice as many marks in English as he did in Science. His total marks in English, Asian Online Smart Prav Science and Mathematics are 126. If the ratio of his marks in English and Mathematics is 2 : 3, his marks in English are:
 - 63 A.
 - Β. 20
 - **C**. 21
 - D. 42



- 24. Wheat worth Rs.80 per kg and Rs.50 per kg is mixed with a third variety in the ratio 1: 2: 3. If the Asian Online Smart Prace mixture is worth Rs.75 per kg, then the price of the third variety per kg will be equal to:
 - Α. **Rs.95**
 - **Rs.85** Β.
 - **Rs.80** С.
 - D. **Rs.90**





26. If 14:30::7:x, then what is the value of x?

- A. 15
- 21 B.
- C. 09
- D. 12



- Asian Online Smart Practice 27. Find the fourth proportional to the numbers 24, 192 and 27.
 - 216 A.
 - Β. 108
 - **C**. 162
 - D. 170.67

MATHEMATICS 7 Dec, 2022 SSC CGL **Ratio and Proportion** ONLINE Shift-4 (5:15 PM -Tier-1 6:15 PM)

- 28. Find the mean proportional between 27 and 300.
 - A. 90
 - 45 B.
 - С. 135
 - D. 180



- 29. A 100 ml solution of H² SO⁴ having concentration of 20% is mixed with a 50% concentrated x ml mixture such that the net mixture is 30% concentrated. Determine x. A. 70 ml B. 80 ml C. 60 ml D. 50 ml



- 30. A is chasing B in the same interval of time. A jumps 8 times, while B jumps 6 times. But the Asian Online Smart Prav distance covered by A in 7 jumps is the same as that of B in 5 jumps. The ratio between the speeds of A and B is
 - 32:24 A.
 - 30:56 Β.
 - 20:21**C**.
 - 28:36 D.



- 31. A mixture contains milk and water in the ratio of 5 : 3, respectively. On adding 7 litres of water, Asian Online Smart Prav the ratio of milk to water becomes 1 : 2. Find the quantity of milk in the mixture.
 - Α. 7 litres
 - 10 litres Β.
 - С. 5 litres
 - D. 3 litres



- Asian Online Smart Practice 32. The fourth proportional to 16 and 26 and 32 is:
 - 16 A.
 - 52 B.
 - С. 54
 - D. 24



- Asian Online Smart Practice 33. Find the fourth proportional to the numbers 17, 272 and 19.
 - 332 A.
 - Β. 323
 - С. 403
 - D. 304



D. 6:25



- 35. Nihit starts a business with Rs.700. After 5 months Amit and Patel joined him with Rs.300 and Asian Online Smart Prav Rs.400 respectively. At the end of the year, the business gave a profit of Rs.627. Find the share of Patel in the profit.
 - Rs.127 Α.
 - Rs.145 Β.
 - Rs.132 С.
 - Rs.156 D.





B.

С.

D.

31

28

29



- Asian Online Smart Practice 38. Three positive numbers are in the ratio of 4:5:7, and the sum of their squares is 15,210. Find the sum of the three numbers.
 - Α. 148
 - 156 Β.
 - С. 126
 - D. 208



- Asian Online Smart Practice 39. What is the fourth proportional to 7, 15 and 21?
 - 29 A.
 - B. 30
 - **C**. 48
 - 45 D.



- Asian Online Smart Practice 40. The average age of a man and his son is 55 years. The ratio of their ages is 7 : 4, respectively. What will be the ratio of their ages after 6 years?
 - Α. 1:2
 - 12:7B.
 - С. 25:17
 - 38:23 D.



- Asian Online Smart Practice 41. In a proportion, the 1st, 2nd and 4th terms are 51, 68 and 108, respectively. What is the 3rd term?
 - 84 A.
 - 83 B.
 - **C**. 82
 - D. 81



- Asian Online Smart Practice 42. X is directly proportional to the square of Y. When X is 12, then Y is 2. Find the value of X when Y is 3.
 - Α. 30
 - B. 9
 - С. 27
 - 18 D.



- 43. The number of units manufactured by a company A was 12500 units in 2019 and 10625 units in 2020. While in company B, the production fell from 34000 units in 2019 to 30600 units in 2020. If X and Y are the percentage decrease in the number of units manufactured by company A and B respectively from 2019 to 2020, then what will be the ratio of X and Y? Asian Online Sh
 - A. 5:3
 - **B**. 3:4
 - C. 3:2
 - D. 8:5



- 44. Salaries of Rida and Riva are in the ratio of 3 : 5, respectively. If the salary of each one is Asian Online Smart Prav increased by Rs.5,000, then the new ratio becomes 5 : 7. What is Riya's present salary?
 - Rs.12,500 A.
 - Β. Rs.7,500
 - Rs.2,500 С.
 - D. Rs.10,000



- Asian Online Smart Practice 45. Determine the LCM of two numbers if their HCF is 9 and their ratio is 14 : 19.
 - 2394 Α.
 - Β. 3990
 - С. 1596
 - 3192 D.



- 46. A can of water and milk mixture contains 60% milk. A part of this mixture is replaced by another Asian Online Smart Prac mixture containing 50% milk and the percentage of milk was found to be 52%. The quantity of mixture replaced is:
 - 1 53 54 52 5 A. B. C. D.



- Lier 10 yea Asian Online Smart Practice 47. The ratio of the present age of father to that of his son is 7 : 2. If after 10 years the ratio of their ages will become 9 : 4, then the present age of the father is:
 - A. 43 years
 - Β. 35 years
 - **C**. 37 years
 - D. 40 years



- 48. P and Q are two alloys of aluminium and copper. The ratios of aluminium and copper in P and Q are 5:11 and 3:5, respectively. If a third alloy is formed by mixing alloys P and Q in the ratio of 1:3, then aluminium is what percentage (rounded off to the nearest integer) of the copper in the Asian Online Smart third alloy?
 - 63 Percent Α.
 - B. 52 Percent
 - С. 48 Percent
 - D. 56 Percent

MATHEMATICS 13 Dec, 2022 SSC CGL **Ratio and Proportion** ONLINE Shift-4 (5:15 PM -Tier-1 6:15 PM)

- Asian Online Smart Practice 49. Find the mean proportional between 25 and 225.
 - 65 A.
 - B. 25
 - С. 75
 - 85 D.

MATHEMATICS

Ratio and Proportion





13 Dec, 2022

Shift-4 (5:15 PM -

<u>6:15 PM)</u>

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	Answer key					ctillo				
1	С	11	В	21	С	31)		41	D	
2	D	12	D	22	B	32	В	42	С	
3	D	13	С	23		33	D	43	С	
4	D	14	D	24	D	34	D	44	А	
5	С	15	C	25	А	35	С	45	А	
6	D	16	C	26	А	36	D	46	С	
7	<u> </u>	17	В	27	А	37	С	47	В	
8	В	18	В	28	А	38	D	48	D	
9	D	19	А	29	D	39	D	49	С	
10	С	20	С	30	С	40	D			