

GRE

Quant Reasoning Assessment

RP, IE, AP, GP

Total Questions: 40

Duration: 50 Min

SECTION-I: RATIO PROPORTION

1. At a party, 40% of the party goers are male. What is the ratio of male to female party goers?

Write the correct answer: _____

2. A and B together have Rs. 1210. If $\frac{4}{15}$ of A's amount is equal to $\frac{2}{5}$ of B's amount, how much amount does B have?

- A. Rs. 460
- B. Rs. 484
- C. Rs. 550
- D. Rs. 664
- E. Rs 770

3. If the ratio of men to women at a party is 4:7, which of the following could be the number of people at the party?

- A. 50
- B. 64
- C. 66
- D. 70
- E. 78

4. Find out the numbers if the ratio between two numbers is 4:6 and their sum is 660.

- A. 100,200
- B. 264,396
- C. 320,240
- D. 660,770
- E. 600,500

5. Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

- A. 2 : 5
- B. 3 : 5
- C. 4 : 5
- D. 6 : 7
- E. 7 : 8

6. The jewel in a crown consists of diamonds, ruby and emeralds. If the ratio of diamond to rubies is $\frac{5}{6}$ and the ratio of rubies to emerald is $\frac{8}{3}$. What is the least number of jewels of any one type in the tiara?
- A. 9 emeralds
 - B. 12 rubies
 - C. 25 diamonds
 - D. 10 emeralds
 - E. 13 diamonds
7. If $x / y = 1 / 3$ then $(x+y) / (x-y) =$
- A. 1
 - B. 2
 - C. -2
 - D. 4
 - E. 3
8. A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 1000 more than D, what is B's share?
- A. Rs 500
 - B. Rs 1500
 - C. Rs 2000
 - D. None of these
 - E. Data insufficient
9. Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?
- A. 2:3:4
 - B. 6:7:8
 - C. 6:8:9
 - D. 9:2:3
 - E. None of these
10. In a mixture 60 liters, the ratio of milk and water is 2:1. If the this ratio is to be 1 : 2, then the quantity of water to be further added is:
- A. 20 litres
 - B. 30 litres
 - C. 40 litres
 - D. 60 litres
 - E. 45 litres

- 11. If the ratio of the ages of two friends A and B is in the ratio 3: 5 and that of B and C is 3: 5 and the sum of their ages is 147, then how old is B?**
- A.** 15 years
 - B.** 75years
 - C.** 49 years
 - D.** 45 years
 - E.** 27 years
- 12. The ratio of the number of boys and girls in a college is 7: 8. If the percentage increase in the number of boys and girls be 20% and 10% respectively, what will be the new ratio?**
- A.** 8:9
 - B.** 17:18
 - C.** 21:22
 - D.** 25:22
 - E.** Cannot be determined
- 13. Salaries of Ravi and Sumit are in the ratio 2: 3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40: 57. What is Sumit's salary?**
- A.** Rs 17,000
 - B.** Rs 20,000
 - C.** Rs 25,500
 - D.** Rs 38,000
 - E.** Rs 40,000
- 14. The ratio of two numbers is 4:1, and their sum is 40. Find the two numbers.**
- A.** 1 and 39
 - B.** 7 and 33
 - C.** 8 and 32
 - D.** 5 and 35
 - E.** 2 and 38
- 15. If $0.75 : x :: 5 : 8$, then x is equal to:**
- A.** 1.12
 - B.** 1.2
 - C.** 1.25
 - D.** 1.30
 - E.** 1.45

16. The sum of three numbers is 98. If the ratio of the first to second is 2 :3 and that of the second to the third is 5 : 8, then the second number is:

- A. 20**
- B. 30**
- C. 48**
- D. 58**
- E. 60**

17. If Rs. 782 be divided into three parts, proportional to $\frac{1}{2} : \frac{2}{3} : \frac{3}{4}$, then the first part is:

- A. Rs 182**
- B. Rs 190**
- C. Rs 196**
- D. Rs 204**
- E. Rs 250**

18. The salaries A, B, C are in the ratio 2 : 3 : 5. If the increments of 15%, 10% and 20% are allowed respectively in their salaries, then what will be new ratio of their salaries?

- A. 3:3:10**
- B. 10: 11:20**
- C. 23:33:60**
- D. 22:9:15**
- E. Cannot be determined**

19. Find the value of a for which a+5, 3a-10 and 2a+a/2 are in AP

- A. 12**
- B. 10**
- C. 15**
- D. 22**
- E. 9**

20. Find out the ratio 1/a: 1/b: 1/c If a: b: c=4:6:8.

- A. 1:2:3**
- B. 4:2:3**
- C. 6:4:3**
- D. 1:4:6**
- E. 6:8:4**

- 21. If 40% of a number is equal to two-third of another number, what is the ratio of first number to the second number?**
- A. 2:5**
 - B. 3:7**
 - C. 5:3**
 - D. 7:3**
 - E. 6:4**
- 22. The fourth proportional to 5, 8, 15 is:**
- A. 18**
 - B. 24**
 - C. 19**
 - D. 20**
 - E. 25**
- 23. Two numbers are in the ratio 3: 5. If 9 is subtracted from each, the new numbers are in the ratio 12: 23. The smaller number is:**
- A. 27**
 - B. 33**
 - C. 49**
 - D. 55**
 - E. 85**
- 24. In a bag, there are coins of 25, 10 and 5 in the ratio of 1 : 2 : 3. If there is \$ 30 in all, how many 5 coins are there?**
- A. 50**
 - B. 100**
 - C. 150**
 - D. 200**
 - E. 250**
- 25. If the ratio of the ages of two friends A and B is in the ratio 3 : 5 and that of B and C is 3 : 5 and the sum of their ages is 147, then how old is B?**
- A. 15 years**
 - B. 75 years**
 - C. 49 years**
 - D. 45 years**
 - E. 27 years**

- 26. In a certain year, California extracted $\frac{2}{7}$ th and Texas extracted $\frac{1}{7}$ th of all the Uranium ore extracted in the United States. If all the other states combined extracted 28 million tons that year, how many million tons did Texas extract that year?**
- A. 12**
 - B. 7**
 - C. 14**
 - D. 5**
 - E. 8**
- 27. At a camp for boys and girls, the ratio of girls to boys is 5: 3. If the camp's enrollment is 160, how many of the children are boys?**
- A. 20**
 - B. 36**
 - C. 45**
 - D. 60**
 - E. 100**
- 28. The current ratio of boys to girls at a certain school is 2 to 5. If 12 additional boys were added to the school, the new ratio of boys to girls would be 4 to 9. How many boys currently attend the school?**
- A. 27**
 - B. 48**
 - C. 54**
 - D. 72**
 - E. 108**
- 29. If 10 baskets contain a total of 50 eggs, how many eggs would 7 baskets contain?**
- A. 10**
 - B. 17**
 - C. 35**
 - D. 40**
 - E. 50**
- 30. A football field is 9600 square yards. If 1200 pounds of fertilizer are spread evenly across the entire field, how many pounds of fertilizer were spread over an area of the field totaling 3600 square yards?**
- A. 450**
 - B. 600**
 - C. 750**
 - D. 2400**
 - E. 3200**

SEQUENCES AND INEQUALITIES (10 Qs, 20mins)

Q1. What is the sum of all 3 digit numbers that leave a remainder of '2' when divided by 3?

- A) 897
- B) 1,64,850
- C) 1,64,749
- D) 1,49,700
- E) 1,50,000

Q2. The sum of the three numbers in A.P is 21 and the product of the first and third number of the sequence is 45. What are the three numbers?

- A) 5, 7, and 9
- B) 9, 7, and 5
- C) 3, 7, and 11
- D) Both (1) and (2)
- E) None of these

Q3. Quantity A: 2^{65}

Quantity B = $(2^{64} + 2^{63} + 2^{62} + \dots + 2^0)$

Q4. If a rubber ball consistently bounces back $\frac{2}{3}$ of the height from which it is dropped, what fraction of its original height will the ball bounce after being dropped and bounced four times without being stopped?

- A) $\frac{16}{81}$
- B) $\frac{16}{27}$
- C) $\frac{4}{9}$
- D) $\frac{37}{81}$
- E) $\frac{9}{12}$

Q5. x , 17 , $3x - y^2 - 2$ and $3x + y^2 - 30$ are four terms of an increasing arithmetic sequence. The sum of the four numbers is divisible by:

- A. 2
- B. 3
- C. 5
- D. 7
- E. 11

Q6. If $|-x/3 + 1| < 2$, which of the following must be true?

- (A) $x > 0$
- (B) $x < 8$
- (C) $x > -4$

- (D) $0 < x < 3$
(E) None of the above

Q7. Which of the following represents the complete range of x over which $x^3 - 4x^5 < 0$?

- (A) $0 < |x| < \frac{1}{2}$
(B) $|x| > \frac{1}{2}$
(C) $-\frac{1}{2} < x < 0$ or $\frac{1}{2} < x$
(D) $x < -\frac{1}{2}$ or $0 < x < \frac{1}{2}$
(E) $x < -\frac{1}{2}$ or $x > 0$

Q8. Let m be a number such that $20 < m < 40$, and let n be a number such that $50 < n < 80$. Which of the following represents all possible values of $m - n$?

- (A) $-60 < m - n < -40$
(B) $-60 < m - n < -10$
(C) $-30 < m - n < -40$
(D) $-30 < m - n < 40$
(E) $-10 < m - n < 60$

Q9. If $4a + 2b < n$ and $4b + 2a > m$, then $b - a$ must be

- A. $< (m - n)/2$
B. $\leq (m - n)/2$
C. $> (m - n)/2$
D. $\geq (m - n)/2$
E. $\leq (m + n)/2$

Q10. $\frac{1}{2} < x < \frac{2}{3}$, and $y^2 < 100$

Quantity A: xy

Quantity B: 6