QUANTITATIVE APTITUDE
Ratio & Proportion

Stay Connected With SPNotifier

EBooks for Bank Exams, SSC & Railways 2020

General Awareness EBooks

Computer Awareness EBooks

Monthly Current Affairs Capsules

Quantitative Aptitude

Quantitative Aptitude is an important and highly scoring topic in **Competitive Exams** especially in **Bank Exams**. Quantitative Aptitude or Data Interpretation based questions are structured assessments that evaluate the talent and skills of the Candidates. It measures the problem-solving skills of the candidates so it has become an important part of Bank Exams.

Every bank exam includes Quantitative Aptitude in their Prelim and Mains Exams. Banks like **SBI, IBPS (for Clerk & PO), IBPS RRB and RBI Grade B** includes Quantitative Aptitude in their syllabus to examine the candidates' **Thinking power**. To understand the importance of Quantitative Aptitude let us have a look at the weightage of this topic in different banking exams.

Prelims and Mains Syllabus for Bank Exams

Prelims Syllabus	Mains Syllabus
✦ Number Series ✦ Data Interpretation ✦ Simplification/Approximation ✦ Quadratic Equation ✦ Data Sufficiency ✦ Mensuration ✦ Average ✦ Profit and Loss ✦ Ratio and Proportion ✦ Time and Work ✦ Time and Distance ✦ Probability ✦ Partnership ✦ Problem on Ages ✦ Simple and Compound Interest ✦ Permutation and Combination	✦ Simplification ✦ Average ✦ Percentage ✦ Ratio and Percentage ✦ Data Interpretation ✦ Mensuration and Geometry ✦ Quadratic Equation ✦ Interest ✦ Problems of Ages ✦ Profit and Loss ✦ Number Series ✦ Speed, Distance and Time ✦ Time and Work ✦ Number System ✦ Data Sufficiency ✦ Linear Equation ✦ Permutation and Combination ✦ Probability ✦ Mixture and Allegations

Quantitative Aptitude - Ratio and Proportion

1. Divide Rs.2340 into three parts, such that first part is double that of second part and second part is 1/3 of the third part. Find the Third part amount?

- **A.** Rs.780
- **B.** Rs.1170
- **C.** Rs.750
- **D.** Rs.390
- **E.** None of these

Answer – B

Explanation:

First: Second: Third = 2:1:3

Third part = 3*2340/6 = 1170

2. The ratio of income of A and B is 2:3. The sum of their expenditure is Rs.8000 and the amount of savings of A is equal to the amount of expenditure of B. What is the their ratio of sum of income to their sum of savings?

- **A.** 5:3
- **B.** 3:2
- **C.** 4:3
- **D.** 3:1
- **E.** None of these

Answer -A

Explanation:
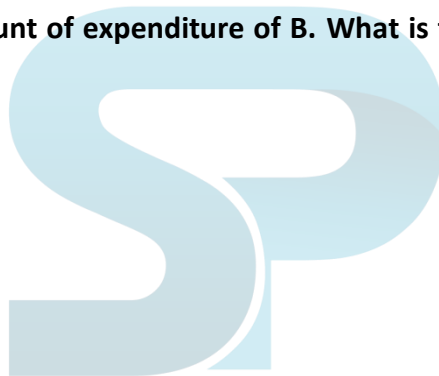
2I-E + E = 8000

I = 4000

Sum of their Income = 5*I = 5*4000 = 20,000

Sum of their Savings = 20000-8000 = 12,000

20000:12000 = 5:3

3. There are 2 containers of equal capacity. The ratio of milk to water in the first container is 4:5 and in the second container is 3:7.If they are mixed up then the ratio of milk to water in the mixture will be

    A. 17:63
    B. 65:96
    C. 34:75
    D. 67:113
    E. None of these

Answer -D

Explanation:

4+5 = 9=> 40:50

3+7 = 10=> 27:63

40+27: 50:63 = 67:113

4. There are two numbers. When 25% of the first number is added to the second number, the resultant number is 1.5 times the first number. What is the ratio of 1st number to the 2nd number?

    A. 3:5
    B. 5:4
    C. 4:5
    D. 2:3
    E. None of these

Answer -C

Explanation:

A+25/100 + B = 1.5A

A/4 + B = 15A/10

10A+40B/40 =60A/40

10A+40B = 60A

50A = 40B

A/B = 4/5
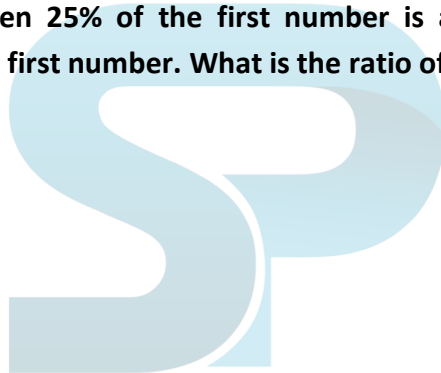
5. A bag contains 10p, 25p and Rs50p coins in the ratio of 5:2:1 respectively. If the total money in the bag is Rs.120.Find the number of 25p coins in that bag?

    A. A.160
    B. B.130
    C. C.110
    D. D.90
    E. None of these

Answer - A

Explanation:

10*5: 25*2: 50*1 = 50:50:50 = 1:1:1

120/3 = Rs.40

Rs. 1 = 4

Rs.40 = 4*40 = 160 coins

6. The ratio of Ganesh's age and his mother's age is 5:12.The difference of their ages is 21.The ratio of their ages after 4 years will be

    A. 3:7
    B. 6:11
    C. 4:7
    D. 19:40
    E. None of these

Answer -D

Explanation:
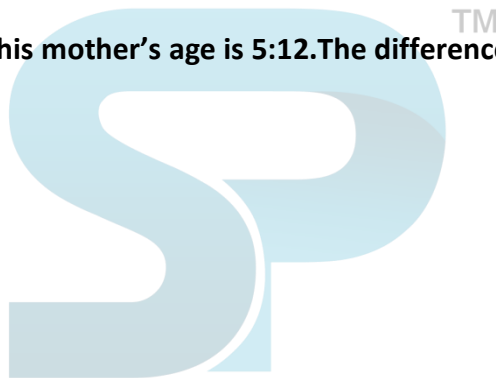
$12x - 5x = 21$

$7x = 21$

$X = 3$

5:12 = 15:36

After 4 years = 19:40

7. The ratio of students of three classes is 2:3:4. If 12 students are increased in each classes then their ratio turns into 13:18:23. What was the total number of students in all the three classes originally?

    A. 250
    B. 215
    C. 225
    D. 190
    E. None of these

Answer - C

Explanation:

50:75:100

15 students increased

65:90:115 => 13:18:23

Total no of students = 50+75+100 = 225

8. Ravi and Govind have money in the ratio 5: 12 and Govind and Kiran also have money in the same ratio 5: 12. If Ravi has Rs. 500, Kiran has

    A. Rs.2500
    B. Rs.2880
    C. Rs.1850
    D. Rs.3100
    E. None of these

Answer -B

Explanation:

Ravi: Kiran = 5/12* 5/12 = 25/144

Kiran = 144*500/25 = 2880

9. A town with a population of 1000 has provision for 30days, after 10 days 600 more men added, how long will the food last at the same rate?

    A. 12 days
    B. 14 ½ days
    C. 12 ½ days
    D. 15 days
    E. None of these

Answer -C

Explanation:

1000*20/1600 = 12 1/2 days

10. A man spends Rs.2480 to buy lunch box Rs.120 each and bottles at Rs.80 each, What will be the ratio of maximum number of bottles to lunch box are bought ?

    A. 13:12
    B. 11:13
    C. 9:12
    D. 7:10
    E. None of these

Answer – A

Explanation:

13*80+ 12*120 = 1040+1440 = 2480

11. A school has 4 sections of class 12, such that half the number of students of 1st section, 1/3rd of 2nd section, 1/4th of 3rd section and 1/5th of the 4th section is equal. If total number of students in class 12 is 420, find the number of students in sections 1st and 2nd.

    A. 180
    B. 120
    C. 240
    D. 150
    E. 260

Answer – D

Explanation:

Let number of students in 4 sections be A, B, C, D respectively. Then

1/2 of A = 1/3 of b = 1/4 of C = 1/5 of D

So A: B: C: D = 2: 3: 4: 5

[When A/2 = B/3 = C/4, then ratio A: B: C = 2: 3: 4]

So students in 1st and 2nd section = $[\frac{(2+3)}{(2+3+4+5)} \times 420] = 150$

12. The income of A, B, and C are in the ratio 3: 4: 7. If their incomes be changed such that the new income of A is 50% increased, 25% increased for B and 25% decrease for C. Find the ratio of their new incomes.

    A. 18: 40: 23
    B. 17: 12: 21
    C. 18: 20: 21
    D. 28: 20 : 21
    E. None of these

Answer – C

Explanation:

Previous ratio = 3: 4:7

New ratio = (150/100) * 3: (125/100) * 4: (75/100) * 7

= 18: 20: 21

13. A, B and C divide Rs 4200 among themselves in the ratio 7: 8: 6. If Rs 200 is added to each of their shares, what is the new ratio in which they will receive the money?

    A. 9: 8: 7
    B. 8: 9: 7
    C. 8: 9: 8
    D. 9: 10: 8
    E. 7: 9: 8

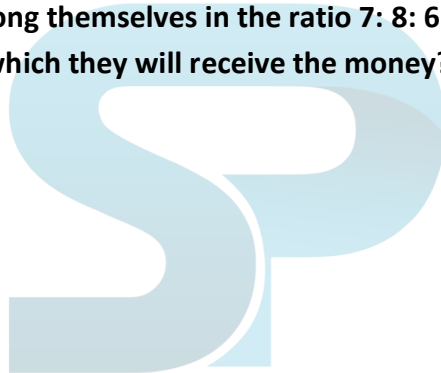Answer – B

Explanation:

A gets = [7/ (7+8+6)] * 4200 = 1400

B gets = [8/ (7+8+6)] * 4200 = 1600

C gets = [6/ (7+8+6)] * 4200 = 1200

Rs 200 added to each share, so new ratio =

1400+200: 1600+200: 1200+200

1600: 1800: 1400

14. The ratio of the monthly salaries of A and B is in the ratio 15: 16 and that of B and C is in the ratio 17: 18. Find the monthly income of C if the total of their monthly salary is Rs 1, 87, 450.

  A. Rs 66,240
  B. Rs 72,100
  C. Rs 62,200
  D. Rs 65,800
  E. Rs 60,300

Answer – A

Explanation:

A/B = 15/16 and B/C = 17*18

So A: B: C = 15*17: 16*17: 16*18

= 255: 272: 288

So C's salary = [288/ (255+272+288)] * 1, 87, 450 = 66, 240.

15. The ratio of the incomes of A and B last year was 9: 13. Ratio of their incomes of last year to this year is 9: 10 and 13: 15 respectively. The sum of their present incomes is Rs. 50,000. What is the present income of B?

  A. Rs 32,000
  B. Rs 24,000
  C. Rs 20,000
  D. Rs 30,000
  E. None of these

Answer – D

Explanation:

Ratio of last year income to this year income of A is 9: 10. So income of A last year is 9x and this year is 10x.

Ratio of last year income to this year income of B is 13: 15. So income of B last year is 13y and this year is 15y.

So ratio of the incomes of A and B last year was 9 x: 13y

Now given that ratio of the incomes of A and B last year was 9: 13.

So 9x/13y = 9/13

This gives x = y

Total of incomes of A and B this year = 10x+15y

= 10x+15x = 25 x (because x=y)

So 25x = 50,000

This gives x = 2,000

So present income of B = 15y = 15x = 15*2000 = 30,000

16. A sum of Rs 315 consists of 25 paise, 50 paise and 1 Re coins in the ratio 3: 4: 6. What is the number of each kind of coin respectively?

   A. 216, 144, 27
   B. 108, 144, 216
   C. 27, 72, 216
   D. 120, 35, 108
   E. 102, 150, 210

Answer – B

Explanation:

25 paise = 25/100 Rs, 50 paise = 50/100 Rs

So value ratio of these coins become = 3*(25/100): 4*(50/100): 6*(1)

= 3/4: 2: 6 = 3: 8: 24

So 25 paise coins value= [3/ (3+8+24)] * 315 = Rs 27, so coins = 27 * (100/25) = 108

Similarly find others.

17. Rs 650 was divided among 3 children in the ratio 2: 4: 7. Had it been divided in the ratio 1/2: 1/4: 1/7, who would have gained the most and by how much?

   A. C, Rs 246
   B. C, Rs 264
   C. B, Rs 18
   D. A, Rs 246
   E. A, Rs 264

Answer – E

Explanation:

New ratio = 1/2: 1/4: 1/7 = 14: 7: 4

So both ratios suggests that C has not gained any money, rather he has lose the money.

For both ratios find the shares of A and B

With ratio 2: 4: 7, A gets = [2/ (2+4+7)] * 650 = 100, B gets = [4/ (2+4+7)] * 650 = 200

With ratio 14: 7: 4, A gets = [14/ (14+7+4)] * 650 = 364, B gets = [7/ (14+7+4)] * 650 = 182

B has also lose the money, A gain the money and = 364 – 100 = 264

18. The ratio of the number of boys to the number of girls in a school is 6: 5. If 20% of boys and 45% of girls come by bus to school, what percentage of students opt transport other than bus to come to school?

    A. 68 9/11%
    B. 68 7/11%
    C. 72 7/11%
    D. 73%
    E. 73 5/11%

Answer – B

Explanation:

If 20% of boys and 45% of girls come by bus, then 80% of boys and 55% of girls opt transport other than bus.

Let total number of students in school = x

So boys who opt other transport are (80/100) * 6/ (6+5) * x = 24x/55

And girls who opt other transport are (55/100) * 5/ (6+5) * x = x/4

So total students who opt other transport = (24x/55) + (x/4) = 151x/220

So required % = [(151x/220)/x] * 100 = 755/11 %

19. The incomes of A and B are in the ratio 1: 2 and their expenditures are in the ratio 2: 5. If A saves Rs 20,000 and B saves Rs 35,000, what is the total income of A and B?

    A. Rs 30,000
    B. Rs 90,000
    C. Rs 90,000
    D. Rs 60,000
    E. Rs 80,000

Answer – C

Explanation:

Income of A = x, of B = 2x

Expenditure of A = 2y, of B = 5y

Savings is (income – expenditure). So

x – 2y = 20,000

2x – 5y = 35,000

Solve the equations, x = 30,000

So total = x+2x = 3x = 3*30,000 = 90,000

20. Rs 5750 is divided among A, B, and C such that if their share be reduced by Rs 10, Rs 15 and Rs 25 respectively, the reminder amounts with them shall be in the ratio 4 : 6 : 9. What was C's share then?

   A. Rs 2700
   B. Rs 2725
   C. Rs 2750
   D. Rs 2625
   E. None of these

Answer – B

Explanation:

When the shares reduce, the total amount will also reduce which is to be divided among them. So after reducing shares by Rs 10, Rs 15 and Rs 25 respectively, total amount is 5750 – (10+15+25) = 5700

So C's share shall be [9/ (4+6+9)] * 5700 = 2700

Actually C would have received = 2700 + 25 = 2725

21. Three cars travel same distance with speeds in the ratio 2 : 4 : 7. What is the ratio of the times taken by them to cover the distance?

   A. 12: 6: 7
   B. 14: 7: 4
   C. 10: 5: 9
   D. 7: 4: 14
   E. 14: 10: 7

Answer – B

Explanation:

s = d/t

Since distance is same, so ratio of times:

1/2: 1/4: 1/7 = 14: 7: 4

22. Section A and section B of 7th class in a school contains total 285 students. Which of the following can be a ratio of the ratio of the number of boys and number of girls in the class?

    A. 6: 5
    B. 10: 9
    C. 11: 9
    D. 13: 12
    E. Cannot be determined

Answer – B

Explanation:

The number of boys and girls cannot be in decimal values, so the denominator should completely divide number of students (285).

Check each option:

6+5 = 11, and 11 does not divide 285 completely.

10+9 = 19, and only 19 divides 285 completely among all.

23. 180 sweets are divided among friends A, B, C and D in which B and C are brothers also such that sweets divided between A and B are in the ratio 2 : 3, between B and C in the ratio 2 : 5 and between C and D in ratio 3 : 4. What is the number of sweets received by the brothers together?

    A. 78
    B. 84
    C. 92
    D. 102
    E. 88

Answer – B

Explanation:

A/B = N1/D1 B/C = N2/D2 C/D = N3/D3

A: B: C: D = N1*N2*N3: D1*N2*N3 : D1*D2*N3 : D1*D2*D3

A/B = 2/3 B/C = 2/5 C/D = 3/4

A: B: C: D

2*2*3: 3*2*3: 3*5*3: 3*5*4

4: 6: 15: 20

B and C together = $[\frac{(6+15)}{(4+6+15+20)}] * 180$

24. Number of students in 4th and 5th class is in the ratio 6: 11. 40% in class 4 are girls and 48% in class 5 are girls. What percentage of students in both the classes are boys?

    A. 62.5%
    B. 54.8%
    C. 52.6%
    D. 55.8%
    E. 53.5%

Answer – B

Explanation:

Total students in both = 6x+11x = 17x

Boys in class 4 = (60/100)*6x = 360x/100

Boys in class 5 = (52/100)*11x = 572x/100

So total boys = 360x/100 + 572x/100 = 932x/100 = 9.32x

% of boys = [9.32x/17x] * 100

25. Consider two alloys A and B. 50 kg of alloy A is mixed with 70 kg of alloy B. A contains brass and copper in the ratio 3: 2, and B contains them in the ratio 4 : 3 respectively. What is the ratio of copper to brass in the mixture?

    A. 8: 5
    B. 7: 5
    C. 5: 11
    D. 4: 9
    E. 5: 7

Answer – E

Explanation:

Brass in A = 3/5 * 50 = 30 kg, Brass in B = 4/7 * 70 = 40 kg

Total brass = 30+40 = 70 kg

So copper in mixture is (50+70) – 70 = 50 kg

So copper to brass = 50: 70

26. Ratio of A and B is in the ratio 5: 8. After 6 years, the ratio of ages of A and B will be in the ratio 17: Find the present age of B.

    A. 72
    B. 65
    C. 77
    D. 60
    E. None of these

Answer – A

Explanation:

A/B = 5/8, A+6/B+6 = 17/26

Solve both, B = 72

27. A bag contains 25p, 50p and 1Re coins in the ratio of 2: 4: 5 respectively. If the total money in the bag is Rs 75, find the number of 50p coins in the bag.

    A. 45
    B. 50
    C. 25
    D. 40
    E. None of these

Answer – D

Explanation:

2x, 4x, 5x

(25/100)*2x + (50/100)*4x + 1*5x = 75

x = 10, so 50 p coins = 4x = 40

28. A is directly proportional to B and also directly proportional to C. When B = 6 and C = 2, A = 24. Find the value of A when B = 8 and C = 3.

    A. 42
    B. 40
    C. 58
    D. 48
    E. None of these

Answer – D

Explanation:

A directly proportional B, A directly proportional to C:

A = kB, A = kC

Or A = kBC

When B = 6 and C = 2, A = 24:

24 = k*6*2

k = 2

Now when B = 8 and C = 3:

A = 2*8*3 = 48

29. A is directly proportional to B and also inversely proportional to the square of C. When B = 16 and C = 2, A = 36. Find the value of A when B = 32 and C = 4.

- **A.** 25
- **B.** 20
- **C.** 18
- **D.** 32
- **E.** None of these

Answer – C

Explanation:

A = kB, A = k/C2

Or A = kB/ C2

When B = 16 and C = 2, A = 36:

36 = k*16/ 22

k = 9

Now when B = 32 and C = 4:

A = 9*32/ 42

30. A is directly proportional to the inverse of B and also inversely proportional to C. When B = 36 and C = 9, A = 42. Find the value of A when B = 64 and C = 21.

    A. 24
    B. 40
    C. 32
    D. 48
    E. None of these

Answer – A

Explanation:

A = k√B, A = k/C

Or A = k√B/C

When B = 36 and C = 9, A = 42:

42 = k√36/9

k = 63

Now when B = 64 and C = 21:

A = 63*√64/21

31. A bag contains 25p coins, 50p coins and 1 rupee coins whose values are in the ratio of 8:4:2. The total values of coins are 840. Then find the total number of coins.

    A. 220
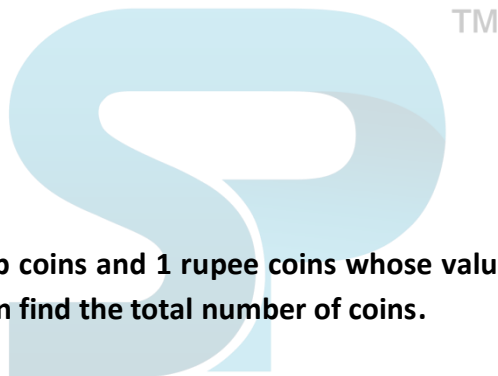   **B.** 240
    C. 260
    D. 280
    E. None of these

Answer – D

Explanation:

Value is given in the ratio 8:4:2.

(8x/0.25) + (4x/0.5) + (2x/1) = 840.

X = 20. Total amount = 14*20 = 280

32. Two vessels contains equal quantity of solution contains milk and water in the ratio of 7:2 and 4:5 respectively. Now the solutions are mixed with each other then find the ratio of milk and water in the final solution?

    A. 11:7
    B. 11:6
    C. 11:5
    D. 11:9
    E. None of these

Answer – A

Explanation:

Milk = 7/9 and water = 2/9 – in 1st vessel

Milk = 4/9 and water = 5/9 – in 2nd vessel

(7/9 + 4/9)/ (2/9 + 5/9) = 11:7

33. Two alloys contain gold and silver in the ratio of 3:7 and 7:3 respectively. In what ratio these alloys must be mixed with each other so that we get a alloy of gold and silver in the ratio of 2:3?

    A. 2:1
    B. 3:1
    C. 4:3
    D. 3:5
    E. None of these

Answer – B

Explanation:

Gold = 3/10 and silver = 7/10 – in 1st vessel

Gold = 7/10 and silver = 3/10 – in 2nd vessel

Let the alloy mix in K: 1, then

(3k/10 + 7/10)/ (7k/10 + 3/10) = 2/3. Solve this equation, u will get K = 3

34. The sum of three numbers is 123. If the ratio between first and second numbers is 2:5 and that of between second and third is 3:4, then find the difference between second and the third number.

    A. 12
    B. 14
    C. 15
    D. 17
    E. None of these

Explanation:

a: b = 2:5 and b:c = 3:4 so a:b:c = 6:15:20

41x = 123, X = 3. And 5x = 15

35. If 40 percent of a number is subtracted from the second number then the second number is reduced to its 3/5. Find the ratio between the first number and the second number.

    A. 1:3
    B. 1:2
    C. 1:1
    D. 2:3
    E. None of these

Answer – C

Explanation:

$[b - (\frac{40}{100}) a] = (\frac{3}{5}) b.$

So we get a = b.

36. The ratio between the number of boys and girls in a school is 4:5. If the number of boys are increased by 30 % and the number of girls increased by 40 %, then what will the new ratio of boys and girls in the school.

    A. 13/35
    B. 26/35
    C. 26/41
    D. 23/13
    E. None of these

Answer – B

Explanation:

boys = 4x and girls = 5x.

Required ratio = [(130/100)*4x]/ [(140/100)*5x]

37. One year ago the ratio between rahul salary and rohit salary is 4:5. The ratio between their individual salary of the last year and current year is 2:3 and 3:5 respectively. If the total current salary of rahul and rohit is 4300. Then find the current salary of rahul.

    A. 1200
    B. 1800
    C. 1600
    D. 2000
    E. None of these

Answer – B

Explanation:

4x and 5x is the last year salry of rahul and rohit respectively

Rahul last year to rahul current year = 2/3

Rohit last year to rohit current year = 3/5

Current of rahul + current of rohit = 4300

(3/2)*4x + (5/3)*5x = 4300.

X = 300.

So rahul current salary = 3/2 * 4* 300 = 1800

38. A sum of 12600 is to be distributed between A, B and C. For every rupee A gets, B gets 80p and for every rupee B gets, C get 90 paise. Find the amount get by C.

    A. 3200
    B. 3600
    C. 4200
    D. 4600
    E. None of these

Answer – B

Explanation:

Ratio of money between A and B – 100:80 and that of B and C – 100:90

So the ratio between A: B: C – 100:80:72

So 252x = 12600, x = 50. So C get = 50*72 = 3600

39. The sum of the squares between three numbers is 5000. The ratio between the first and the second number is 3:4 and that of second and third number is 4:5. Find the difference between first and the third number.

  A. 20
  B. 30
  C. 40
  D. 50
  E. None of these

Answer – A

Explanation:

$a^2 + b^2 + c^2 = 5000$

a:b:c = 3:4:5

$50x^2 = 5000$.

X = 10.

5x – 3x = 2*10 = 20

40. The ratio between two numbers is 7:5. If 5 is subtracted from each of them, the new ratio becomes 3:5. Find the numbers.
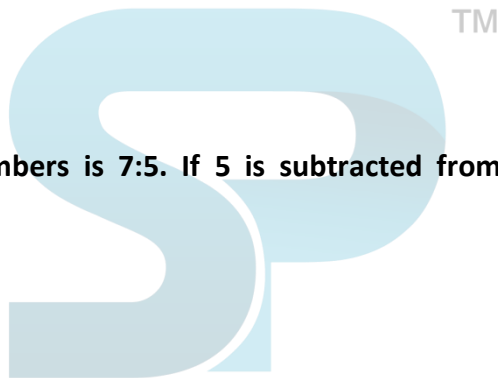
  A. 7/2, 5/2
  B. 3/2, 7/2
  C. 9/2, 7/2
  D. 11/2, 5/2
  E. None of these

Answer – A

Explanation:

$$\frac{(7x - 5)}{(5x - 5)} = \frac{3}{5}$$

X = 1/2 so the numbers are 7/2 and 5/2

41. A company reduces his employee in the ratio 14: 12 and increases their wages in the ratio 16:18, Determine whether the bill of wages increases or not and in what ratio.

- **A.** Decreases, 28: 27
- **B.** Increases, 27:28
- **C.** Decreases, 29:28
- **D.** Increases, 28:29
- **E.** None of these

Answer – A

Explanation:

Let initial employee be 14a and final employee be 12a similarly initial wage is 16b and final wage be 18b

Total initial wage = 14a * 16b = 224ab, total final wage = 12a* 18b = 216ab

So clearly wages decreases and ratio = 224ab: 216ab = 28:27

42. A bucket contains liquid A and B in the ratio 4:5. 36 litre of the mixture is taken out and filled with 36 litre of B. Now the ratio changes to 2:5. Find the quantity of liquid B initially.

- **A.** 55ltr
- **B.** 56ltr
- **C.** 57ltr
- **D.** 58ltr
- **E.** None of these
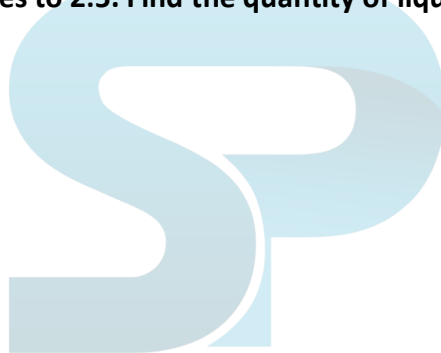
Answer – B

Explanation:

Let A = 4x and B = 5x

Now, A = 4x – 36*4/9 and B = 5x – 36*5/9 + 36 Now, ratio between A and B = 2:5

X = 11.2 now B = 11.2*5 = 56

43. Two numbers are in the ratio of 5:6 and if 4 is added to the first number and 4 is subtracted from the second number then the ratio becomes 3:2. Find the difference between two numbers.

- **A.** 2.5
- **B.** 3.5
- **C.** 4.5
- **D.** 6.5
- **E.** None of these

Answer – A

Explanation:

$$\frac{(5x + 4)}{(6x - 4)} = \frac{3}{2}$$

$$= \frac{2 \times (5x + 4)}{3 \times (6x - 4)} = 1$$

$10x + 8 = 18x - 12$

$18x - 10x = 12 + 8$

$8x = 20$

$x = 2.5$

44. The income of riya and priya are in the ratio of 4:5 and their expenditure is in the ratio of 2:3. If each of them saves 2000, then find their income.

    A. 4000, 6000
    B. 4000, 5000
    C. 5000, 4000
    D. 5000, 6000
    E. None of these

Answer – B

Explanation:

$4x - 2y = 2000$ and $5x - 3y = 2000$.

X = 1000, so income = 4000 and 5000

45. A 50 litre of mixture contains milk and water in the ratio 2: 3. How much milk must be added to the mixture so that it contains milk and water in the proportion of 3: 2?

    A. 20
    B. 25
    C. 30
    D. 35
    E. None of these

Answer – B

Explanation:

$$\frac{(20 + x)}{30} = \frac{3}{2} = 40 + 2x = 90$$

$= 90 - 40 = 2x$

46. Two alloys contain platinum and gold in the ratio of 1:2 and 1:3 respectively. A third alloy C is formed by mixing alloys one and alloy two in the ratio of 3:4. Find the percentage of gold in the mixture

    A. 79.2/7%
    B. 71.2/7%
    C. 73.2/7%
    D. 71.3/7%
    E. None of these

Answer – d

Explanation:

Platinum = 1/3 and 1/4

Gold = 2/3 and 3/4

Alloy one and two are mixed in the ratio of 3:4, so ratio of platinum and gold in final ratio – 2:5

So gold % = (5/7)*100

47. The sum of three numbers is 980. If the ratio between first and second number is 3:4 and that of second and third is 3:7. Find the difference between first and last number.

    A. 380
    B. 360
    C. 340
    D. 400
    E. None of these

Answer – A

Explanation:

Ratio between three numbers – 9:12:28

49x = 980, x = 20 difference between number = 19*20 = 380

48. The ratio between number of girls and boys in a school is 5: 6. If 40 percent of the boys and 20 percent of the girls are scholarship holders, what percentage of the students does not get scholarship?

   A. 68%
   B. 69%
   C. 71%
   D. 80%
   E. None of these

Answer – B

Explanation:

Girls = 5x and boys = 6x

Girls that don't get scholarship = 5x * 80/100 = 4x and boys that don't get scholarship = 6x * 60/100 = 3.6x

Percent students that didn't get scholarship = (7.6x/11x)*100 = 69 (approx.)

49. A bag contains 25p coins, 50p coins and 1 rupee coins whose values are in the ratio of 8:4:2. The total values of coins are 840. Then find the total amount in rupees.

   A. 220
   B. 240
   C. 260
   D. 280
   E. None of these

Answer – D

Explanation:

Value is given in the ratio 8:4:2.

(8x/0.25) + (4x/0.5) + (2x/1) = 840.

X = 20. Total amount = 14*20 = 280

50. An amount is to be divided between A, B and C in the ratio 2:3:5 respectively. If C gives 200 of his share to B the ratio among A, B and C becomes 3:5:4. What is the total sum?

    A. 5000
    B. 6000
    C. 7000
    D. 8000
    E. None of these

Answer – B

Explanation:

s2x, 3x + 200, 5x – 200

2x/ (3x + 200) = 3/5, we will get x = 600, so total amount = 10*600 = 6000

Stay Connected With SPNotifier

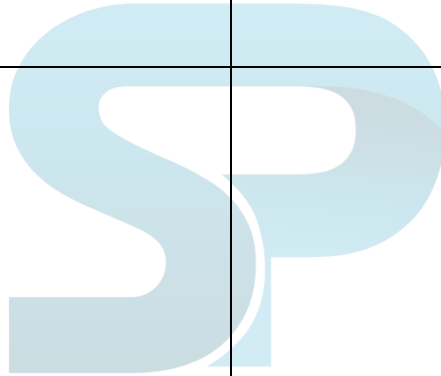|	

Quantitative Aptitude EBooks

Reasoning Ability EBooks

English Language EBooks