MBA - Pro, 2025

Quantitative Aptitude

DPP: 1

Basics of ratio

Q1 If Rs. 7500 are distributed among a,b & c and a:b = 3:2 and b:c = 3:5 then find the share of a?
(A) 3000 (B) 2700
(C) 2500 (D) 2950

Q2 Divide Rs 4843 in the ratio of A:B:C = $\frac{1}{4} : \frac{2}{3} : \frac{3}{2}$ and find who got the highest amount?
(A) 1250 (B) 1780
(C) 1890 (D) 3006

Q3 Sheenu have neckless, bracelets and rings in a ratio of 7:5:4. if she has 12 rings then find the difference of neckless and bracelets.
(A) 6 (B) 4
(C) 3 (D) 1

Q4 The price of phone, laptop & tablet are in the ratio of 4:5:6, next year the price of phone, laptop & tablet increase by 50%, 40% and 15% respectively then the ratio of price of phone, laptop & tablet after increments.
(A) 60 : 70 : 73 (B) 61 : 72 : 69
(C) 6 : 7 : 6 (D) 60 : 70 : 69

Q5 Ravi and Sunita invested 7000 and 5000 respectively in a bussiness. What should be the share of Sunita in a profit of 2436 at the end of a year?
(A) 1200 (B) 1015
(C) 1550 (D) 1600

Q6 A factory employs skilled workers, unskilled workers and clerks in the proportion $8 : 5 : 1$, and the wages of a skilled worker, an unskilled worker and a clerk are in the ratio $5 : 2 : 3$. When the total daily wages of all amount to Rs. 318 . The wages paid to each category of workers are :
(A) Rs. 240 , Rs. 60 , Rs. 18
(B) Rs. 200, Rs. 90, Rs. 28
(C) Rs. 150, Rs. 108, Rs. 60
(D) Rs. 250 , Rs. 50 , Rs. 18

Q7 Sachin has two-third of the money as that with Kalpesh. Kalpesh has three-fifth of the money as that with Lokesh. If Lokesh has Rs. 1,200, how much does Sachin have?
(A) 720 (B) 320
(C) 200 (D) 480

Q8 Three numbers are in the ratio 8: 7: 5 respectively and their sum is 900. When largest number is decreased by 80 and other two numbers are increased by 35 each, then the respective ratio changes to:
(A) 9:10: 7 (B) 24: 28: 21
(C) 28: 35: 26 (D) 14: 15: 13

Q9 A number is divided into 3 parts. 6 times the third part is equal to the 8 times the second part, which is equal to 5 times the first part. In what ratio is the number divided?
(A) 5 : 8 : 6 (B) 24 : 15 : 20
(C) 6 : 8 : 5 (D) 20 : 16 : 23

Q10 The monthly salaries of Karan and Arjun are in the ratio 7 : 8. If both of them get a salary increment of Rs. 1500 each, the new ratio

becomes 52 : 59. What is the new monthly salary of Arjun (in Rs)?

(A) 28600 (B) 29500

(C) 31500 (D) None of these

Q11 The monthly salaries of Karan and Arjun are in the ratio 7 : 8. If both of them get a salary increment of Rs. 1500 each, the new ratio becomes 52 : 59. What is the new monthly salary of Karan (in Rs)?

Q12 Ramesh divided his amount among three Sons Manjesh, Kamlesh and Sudesh such that the ratio of the amount received by Manjesh and Kamlesh is 3:5 and the ratio of the amount received by Kamlesh and Sudesh is 3:4. If the amount received by Sudesh is Rs 8800, then find the total amount of Ramesh?

(A) Rs 18240 (B) Rs 19360

(C) Rs 20460 (D) Rs 22600

Q13 Rs. 10900 has been divided among x, y and z such that if their shares are reduced by Rs. 30, Rs. 20 and Rs. 50, the balance is in the ratio of 4: 3: 5. What is y's share (in Rs)?

(A) 3,180 (B) 2,720

(C) 3,253.33 (D) 3,200

Q14 A sum of money is to be distributed among A, B and C in the ratio of 2: 4: 9. If C gets Rs 1400 more than A, then what is the share of B?

(A) Rs 540 (B) Rs 750

(C) Rs 640 (D) Rs 800

Q15 The ratio of the monthly income of P and Q is 6 : 7 and that of their monthly expenditure is 4: 5. If the income of P is twice the expenditure of Q, then what is the ratio between the savings of P and Q?

(A) 10: 9 (B) 9:10

(C) 3: 7 (D) 6:5

Answer Key

Q1	(B)
Q2	(D)
Q3	(A)
Q4	(D)
Q5	(B)
Q6	(A)
Q7	(D)
Q8	(C)
Q9	(B)
Q10	(B)
Q11	26000
Q12	(B)
Q13	(B)
Q14	(D)
Q15	(B)

Hints & Solutions

Note: scan the QR code to watch video solution

Q1 Text Solution:

If Rs. 7500 are distributed among a,b & c and a:b = 3:2 and b:c = 3:5 then find the share of a?

a:b = 3:2

b:c = 3:5 in both the mentioned ratio b is same but ratio is different so we will match the ratio by multiplying 3 in first ratio and 2 in second ratio then we got,

a:b:c = 9:6:10

a = 9k, b = 6k & c = 10k

so their sum -

9k + 6k + 10k = 7500

25k = 7500

k = 300

a = 9k = 9*300 = 2700

Video Solution:

Q2 Text Solution:

Given A:B:C = $\frac{1}{4} : \frac{2}{3} : \frac{3}{2}$ now we will multiply the ratio by the LCM of denominator 4,3,2 = 12

A:B:C = $\frac{1}{4} \times 12 : \frac{2}{3} \times 12 : \frac{3}{2} \times 12$

A:B:C = 3:8:18

now on bracking the ratio we get,

A = 3k

B = 8k & C = 18k

A+B+C = 29k = 4843.

k = 167

C got the highest value that is 18k = 18*167 = 3006

Video Solution:

Q3 Text Solution:

neckless : bracelets : rings = 7: 5: 4

on bracking the ratio-

neckless = 7k

bracelets = 5k and rings = 4k

given, rings = 12

so, 4k = 12

k = 3

so difference of neckless and bracelets = 7k - 5k = 2k = 2*3 = 6 Ans.

Video Solution:

Q4 Text Solution:

Given,

The price of phone: laptop : tablet = 4:5:6

next year the price of phone, laptop & tablet increase by 50%, 40% and 15%

so,

The price of phone: laptop : tablet = 4*150% : 5*140% : 6*115%

The price of phone: laptop : tablet = 600% : 700% : 690%

The price of phone: laptop : tablet = 60 : 70 : 69

Ans.

Video Solution:

Q5 Text Solution:

Profit share = Capital1*time1 : Capital2*time2

so, ratio of profit share -

Ravi : Sunita = 7000*1yr : 5000*1yr = 7:5

profit of Ravi = 7k and profit of Sunita = 5k

total profit = 2436(given)

7k + 5k = 2436

12k = 2436

k = 2436/12

k = 203

Share of Sunita = 5k = 5 * 203 = 1015Ans.

Video Solution:

Q6 Text Solution:

Given, skilled workers:unskilled workers: clerk = 8:5:1

Let it be $8x$, $5x$ and x in that order for skilled,unskilled and clerk

Also given, wages of skilled workers:unskilled workers:clerk $= 5:2:3$

Let it be $5y$, $2y$ and $3y$ in that order skilled workers,unskilled workers and clerk

Total daily wages of all $=$ Rs . 318

Or $(8x \times 5y) + (5x \times 2y) + (x \times 3y) =$ Rs. 318

Or $40xy + 10xy + 3xy =$ Rs. 318

Or $53xy =$ Rs. 318

Or $xy =$ Rs. 6

Therefore the wages paid to each category in that order $=$ Rs. $[(40 \times 6), (10 \times 6), (3 \times 6)]$

Or Rs. 240,Rs. 60, Rs. 18

Video Solution:

Q7 Text Solution:

Lokesh has money = Rs. 1200

Then money with Kalpesh $= \frac{3}{5}$ of Lokesh money

$= \frac{3}{5} \times$ Rs. 1200

$$= \text{Rs } 720$$

Therefore money with Sachin $= \frac{2}{3}$ of Kalpesh money $= \frac{2}{3}$ Rs. 720

$$= \text{Rs. } 480$$

Video Solution:

Q8 Text Solution:

Let the numbers are 8a, 7a and 5a respectively.

Then,

8a+ 7a+5a= 900

a = 45

Then, 8a = 8 × 45 = 360

7a = 7 × 45 = 315

5a = 5× 45 = 225

Therefore, new ratio = (360-80): (315+ 35): (225 +35) = 28: 35: 26

Ans. c

Video Solution:

Q9 Text Solution:

Let the 3 parts into which the number is divided be a, b and c. It is given that

5a = 8b = 6c

Let each value be equal to x.

So, 5a = x => a = $\frac{x}{5}$

8b = x => b = $\frac{x}{8}$

6c = c => c = $\frac{x}{6}$

Hence, a : b : c = $\frac{x}{5} : \frac{x}{8} : \frac{x}{6}$

LCM of a, b and c will be 120.

a : b : c = $(\frac{x}{5} : \frac{x}{8} : \frac{x}{6}) \times 120$

= 24 : 15 : 20 (where 120 is the LCM of 5, 8 and 6)

Hence, a, b and c are in the ratio of 24 : 15 : 20.

Video Solution:

Q10 Text Solution:

Let the unit of ratio be x

Karan's salary = 7x

Arjun's salary = 8x

After increment,

$\Rightarrow \frac{(7x + 1500)}{(8x + 1500)} = \frac{52}{59}$

⇒ 59(7x + 1500) = 52(8x + 1500)

⇒ 413x + 88500 = 416x + 78000

⇒ x = Rs. 3500

⇒ Arjun's new month salary = 8x + 1500 = 8 × 3500 + 1500

⇒ Arjun's new month salary = Rs. 29500

∴ The new monthly salary of Arjun is Rs. 29500.

Video Solution:

Q11 Text Solution:

Let, salary of Karan = 7x & Arjun = 8x

$\frac{7x+1500}{8x+1500} = \frac{52}{59}$

59(7x) + 59(1500) = 52(8x) + 52(1500)

413x + 59(1500) = 416x + 52(1500)

59(1500) - 52(1500) = 3x

1500 (59 - 52) = 3x

3500 = x

New salary of Karan = 7x + 1500

= 7(3500) +1500

= 24500 + 1500

= 26000 Ans.

Video Solution:

Q12 Text Solution:

Manjesh: Kamlesh =3: 5

Kamlesh: Sudesh = 3: 4

Manjesh: Kamlesh: Sudesh = 9 : 15 : 20

Total amount = $\frac{44}{20}$ × 8800 = 19360

Video Solution:

Q13 **Text Solution:**

Given, x + y + z = 10900 and

x – 30: y – 20: z – 50 = 4: 3: 5

So, in total 100 is reduced.

So, the balance, 10800 should be divided in the ratio 4: 3: 5

Y Share = $\frac{3}{12}$ ×10800 + 20

= 2720

Video Solution:

Q14 **Text Solution:**

A : B : C = 2 : 4 : 9

Let the share of A, B and C be 2k, 4k and 9k respectively.

9k - 2k =1400

7k = 1400

k = 200

Share of B = 4k = 4 × 200 = 800

Video Solution:

Q15 **Text Solution:**

Income = Expenditure + saving

Let the monthly income of P and Q be '6a' and '7a' And expenditure be '4b' and '5b' It is given income of P is twice the expenditure of Q

Therefore, 6a = 2 × 5b

$\frac{a}{b} = \frac{5}{3}$, therefore a = 5y and b = 3y

Ratio between the savings of P and Q = $\frac{6a-4b}{7b-5b}$

Therefore,

$\frac{6a-4b}{7a-5b} = \frac{6\times5y-4\times3y}{7\times5y-5\times3y} = \frac{30y-12y}{35y-15y} = \frac{18y}{20y} = \frac{9}{10}$.

Video Solution: