Visit www.downloadmela.com for more papers

1. 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

Answer & Explanation

Answer: Option **B**

Explanation:

$\frac{4}{15}$ A $= \frac{2}{5}$ B

$\Rightarrow$ A $= \left(\frac{2}{5} \times \frac{15}{4}\right)$B

$\Rightarrow$ A $= \frac{3}{2}$ B

$\Rightarrow \frac{A}{B} = \frac{3}{2}$

$\Rightarrow$ A : B = 3 : 2.

$\therefore$ B's share = Rs. $\left(1210 \times \frac{2}{5}\right)$ = Rs. 484.

2. 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

Answer & Explanation

Answer: Option **C**

Explanation:

Let the third number be x.

Then, first number = 120% of $x = \frac{120}{100}x = \frac{6}{5}x$

Second number = 150% of $x = \frac{150}{100}x = \frac{3}{2}x$

$\therefore$ Ratio of first two numbers $= \left(\frac{6}{5}x : \frac{3}{2}x\right) = 12x : 15x = 4 : 5$.

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

3. 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

Answer & Explanation

Answer: Option **C**

Explanation:

Let the shares of A, B, C and D be Rs. $5x$, Rs. $2x$, Rs. $4x$ and Rs. $3x$ respectively.

Then, $4x - 3x = 1000$

$\Rightarrow x = 1000$.

$\therefore$ B's share = Rs. $2x$ = Rs. (2 x 1000) = Rs. 2000.

4. 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.** None of these

Answer & Explanation

Answer: Option **A**

Explanation:

Originally, let the number of seats for Mathematics, Physics and Biology be $5x$, $7x$and $8x$ respectively.

Number of increased seats are (140% of $5x$), (150% of $7x$) and (175% of $8x$).

$\Rightarrow \left(\frac{140}{100} \times 5x\right)$, $\left(\frac{150}{100} \times 7x\right)$ and $\left(\frac{175}{100} \times 8x\right)$

$\Rightarrow 7x$, $\frac{21}{2}x$ and $14x$.

$\therefore$ The required ratio = $7x : \frac{21}{2}x : 14x$

$\Rightarrow 14x : 21x : 28x$

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

$\Rightarrow$ 2 : 3 : 4.

5. In a mixture 60 litres, the ratio of milk and water 2 : 1. If the this ratio is to be 1 : 2, then the quanity of water to be further added is:

A. 20 litres **B.** 30 litres

C. 40 litres **D.** 60 litres

Answer & Explanation

Answer: Option **D**

Explanation:

Quantity of milk = $\left(60 \times \frac{2}{3}\right)$ litres = 40 litres.

Quantity of water in it = (60- 40) litres = 20 litres.

New ratio = 1 : 2

Let quantity of water to be added further be x litres.

Then, milk : water = $\left(\frac{40}{20 + x}\right)$.

Now, $\left(\frac{40}{20 + x}\right) = \frac{1}{2}$

$\Rightarrow 20 + x = 80$

$\Rightarrow x = 60$.

$\therefore$ Quantity of water to be added = 60 litres.

6. 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.** Cannot be determined

Answer & Explanation

Answer: Option **C**

Explanation:

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

Originally, let the number of boys and girls in the college be $7x$ and $8x$ respectively.

Their increased number is (120% of $7x$) and (110% of $8x$).

$\Rightarrow \left(\frac{120}{100} \times 7x\right)$ and $\left(\frac{110}{100} \times 8x\right)$

$\Rightarrow \frac{42}{5}x$ and $\frac{44}{5}x$

$\therefore$ The required ratio $= \left(\frac{42}{5}x : \frac{44}{5}x\right) = 21 : 22.$

7. 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

Answer & Explanation

Answer: Option **D**

Explanation:

Let the original salaries of Ravi and Sumit be Rs. $2x$ and Rs. $3x$ respectively.

Then, $\frac{2x + 4000}{3x + 4000} = \frac{40}{57}$

$\Rightarrow 57(2x + 4000) = 40(3x + 4000)$

$\Rightarrow 6x = 68{,}000$

$\Rightarrow 3x = 34{,}000$

Sumit's present salary $= (3x + 4000) =$ Rs.$(34000 + 4000) =$ Rs. 38,000.

8. If 0.75 : x :: 5 : 8, then x is equal to:

A. 1.12 **B.** 1.2

C. 1.25 **D.** 1.30

Answer & Explanation

Answer: Option **B**

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

Explanation:

$(x \times 5) = (0.75 \times 8) \Rightarrow x = \left(\frac{6}{5}\right) = 1.20$

9. 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

Answer & Explanation

Answer: Option **B**

Explanation:

Let the three parts be A, B, C. Then,

$A : B = 2 : 3$ and $B : C = 5 : 8 = \left(5 \times \frac{3}{5}\right) : \left(8 \times \frac{3}{5}\right) = 3 : \frac{24}{5}$

$\Rightarrow A : B : C = 2 : 3 : \frac{24}{5} = 10 : 15 : 24$

$\Rightarrow B = \left(98 \times \frac{15}{49}\right) = 30.$

10. 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

Answer & Explanation

Answer: Option **D**

Explanation:

Given ratio $= \frac{1}{2} : \frac{2}{3} : \frac{3}{4} = 6 : 8 : 9.$

$\therefore$ 1^{st} part $= \text{Rs.} \left(782 \times \frac{6}{23}\right) = \text{Rs. } 204$

11. 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

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

C. 23 : 33 : 60 **D.** Cannot be determined

Answer & Explanation

Answer: Option **C**

Explanation:

Let A = 2k, B = 3k and C = 5k.

A's new salary = $\frac{115}{100}$ of 2k = $\left(\frac{115}{100} \times 2k\right) = \frac{23}{10}k$

B's new salary = $\frac{110}{100}$ of 3k = $\left(\frac{110}{100} \times 3k\right) = \frac{33}{10}k$

C's new salary = $\frac{120}{100}$ of 5k = $\left(\frac{120}{100} \times 5k\right) = 6k$

$\therefore$ New ratio $\left(\frac{23}{10}k : \frac{33}{10}k : 6k\right)$ = 23 : 33 : 60

12. 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

Answer & Explanation

Answer: Option **C**

Explanation:

Let 40% of A = $\frac{2}{3}$ B

Then, $\frac{40A}{100} = \frac{2B}{3}$

$\Rightarrow \frac{2A}{5} = \frac{2B}{3}$

$\Rightarrow \frac{A}{B} = \left(\frac{2}{3} \times \frac{5}{2}\right) = \frac{5}{3}$

$\therefore$ A : B = 5 : 3.

13. The fourth proportional to 5, 8, 15 is:

A. 18 **B.** 24

C. 19 **D.** 20

Answer & Explanation

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

Answer: Option **B**

Explanation:

Let the fourth proportional to 5, 8, 15 be x.

Then, 5 : 8 : 15 : x

$\Rightarrow 5x = (8 \times 15)$

$x = \frac{(8 \times 15)}{5} = 24.$

14. Two number 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

Answer & Explanation

Answer: Option **B**

Explanation:

Let the numbers be $3x$ and $5x$.

Then, $\frac{3x - 9}{5x - 9} = \frac{12}{23}$

$\Rightarrow 23(3x - 9) = 12(5x - 9)$

$\Rightarrow 9x = 99$

$\Rightarrow x = 11.$

$\therefore$ The smaller number = (3 x 11) = 33.

15. In a bag, there are coins of 25 p, 10 p and 5 p in the ratio of 1 : 2 : 3. If there is Rs. 30 in all, how many 5 p coins are there?

A.	50	**B.**	100
C.	150	**D.**	200

Answer & Explanation

Download More Aptitude Questions,Reasoning questions,Puzzles

Visit www.downloadmela.com for more papers

Answer: Option **C**

Explanation:

Let the number of 25 p, 10 p and 5 p coins be x, $2x$, $3x$ respectively.

Then, sum of their values = Rs. $\left(\frac{25}{100}x + \frac{10}{100}2x + \frac{5}{100}3x\right)$ = Rs. $\frac{60}{100}x$

$\therefore \frac{60}{100}x = 30 \Leftrightarrow x = \frac{30 \times 100}{60} = 50.$

Hence, the number of 5 p coins = (3 x 50) = 150.

Download More Aptitude Questions,Reasoning questions,Puzzles