

Bank Foundation Quantitative Aptitude PDF 2

Q1. An article sold at $\frac{4}{5}$ of its original selling price, then it gives a profit of 20%. Find the profit percentage, when the same article is sold at its actual selling price?

- (a) 15 %
- (b) 20 %
- (c) 25%
- (d) 22 %
- (e) 50%

Q2. A sum of Rs. x was invested at 10% simple interest for 3 years. If the same sum was invested at 4% more for same period, then it would have fetched Rs. 120 more. Find the value of 5x. (in Rs.)?

- (a) 5000
- (b) 4800
- (c) 3600
- (d) 5500
- (e) 4000

Q3. 4 men & 3 children complete a project for Rs. 600 in 3 days. If a man completes same project in 15 days, then find daily wage of a man?

- (a) Rs 36
- (b) Rs 40
- (c) Rs 44
- (d) Rs 48
- (e) Rs 42

Q4. A tank is normally filled in 15 hours but due to a leak in the tank, it takes 3 hours more to be filled. If the tank is completely filled, then the leak will empty it in how many hours?

- (a) 72
- (b) 84
- (c) 90
- (d) 60
- (e) 75

Q5. Average of eight consecutive odd numbers is 10. What will be the average of smallest four numbers out of eight numbers?

- (a) 7
- (b) 8
- (c) 6
- (d) 4
- (e) 5



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Q6. A person is 16 years older than his son. After two years, the person's age will be double the age of his son. Find the age of his son eight years hence will be?

- (a) 24 years
- (b) 20 years
- (c) 22 years
- (d) 18 years
- (e) 28 years

Q7. If the length and breadth of a rectangle is increased by 20% and 10% respectively, then find the percentage increase in the area of the rectangle?

- (a) 36 %
- (b) 32%
- (c) 28%
- (d) 40%
- (e) 34%

Q8. A container is full of 75-liter milk. If 15-liter content of container is replaced by water and the same process is further repeated two times, then find the quantity of milk left in the final solution?

- (a) 36.4 liters
- (b) 38.4 liters
- (c) 40 liters
- (d) 41.4 liters
- (e) 48.4 liters

Q9. Aakash and Vikash invested Rs($x+2000$) and Rs($x+3000$) respectively in a partnership. If total profit at the end of the year is Rs 28000 and profit share of Vikash's is Rs 16000, then find the value of x (in Rs)?

- (a) 1500
- (b) 1000
- (c) 2000
- (d) 500
- (e) 1200

Q10. A boat covers 36 km in downstream in 4 hrs. If the speed of the current is $\frac{1}{3}$ rd of its downstream speed, then find the time taken by boat to cover 78 km upstream?

- (a) 30 hours
- (b) 26 hours
- (c) 28 hours
- (d) 24 hours
- (e) 32 hours

Directions (11-15): In each of the following questions, two equations (I) and (II) are given you have to solve both the equations and give answer.

Q11.

I. $x^2 - 11x + 28 = 0$

II. $y^2 - 15y + 56 = 0$

- (a) If $x > y$
- (b) If $x \geq y$
- (c) If $x < y$
- (d) If $x \leq y$
- (e) If $x = y$ or no relation can be established between x and y .

Q12.

I. $x^2 = 144$

II. $y^2 - 22y + 121 = 0$

- (a) If $x > y$
- (b) If $x \geq y$
- (c) If $x < y$
- (d) If $x \leq y$
- (e) If $x = y$ or no relation can be established between x and y .

Q13.

I. $x^2 - 18x + 45 = 0$

II. $y^2 + 17y + 72 = 0$

- (a) If $x > y$
- (b) If $x \geq y$
- (c) If $x < y$
- (d) If $x \leq y$
- (e) If $x = y$ or no relation can be established between x and y .

Q14.

I. $x^2 = 289$

II. $(y - 17)^2 = 0$

- (a) If $x > y$
- (b) If $x \geq y$
- (c) If $x < y$
- (d) If $x \leq y$
- (e) If $x = y$ or no relation can be established between x and y .

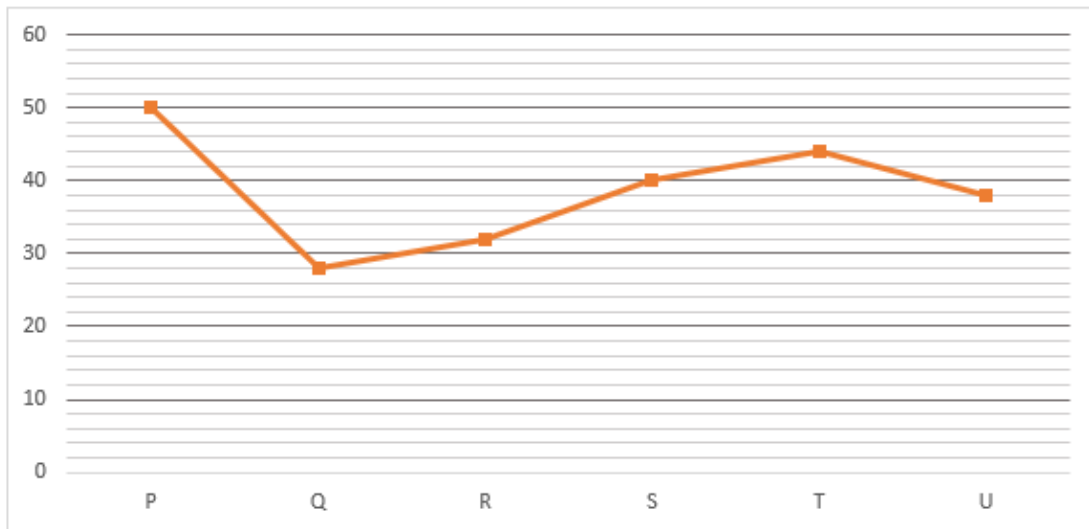
Q15.

I. $x^2 + 15x + 56 = 0$

II. $y^2 + 16y + 64 = 0$

- (a) If $x > y$
- (b) If $x \geq y$
- (c) If $x < y$
- (d) If $x \leq y$
- (e) If $x = y$ or no relation can be established between x and y .

Directions (16-20): The line graph given below shows the total number of posts (Photos + Reels) shared by six (P, Q, R, S, T & U) people in June 2021 on Instagram. Read the data carefully and answer the questions.



Q16. The total post shared by R is what percent less than the total post shared by S?

- (a) 20%
- (b) 25%
- (c) 15%
- (d) 10%
- (e) 30%

Q17. In July 2021 total posts shared by Q & U is 12 and 15 more than previous month respectively, then find the total number of the post shared by Q & U in July 2021?

- (a) 95
- (b) 91
- (c) 93
- (d) 97
- (e) 99

Q18. Find the average number of posts shared by P, R & U?

- (a) 42
- (b) 48
- (c) 40
- (d) 36
- (e) 44

Q19. Total photos shared by T is four more than total reels shared by him, then find total reels shared by T?

- (a) 24
- (b) 20
- (c) 28
- (d) 22
- (e) 30

Q20. If the ratio of total photos to total reels shared by Q is 5: 9, then find total photos shared by Q?

- (a) 10
- (b) 18
- (c) 12
- (d) 14
- (e) 16

Directions (21-30): What will come in place of the question mark (?) in the following questions.

Q21. $115 \times 8 + ? = 20\% \text{ of } 6000$

- (a) 280
- (b) 180
- (c) 200
- (d) 300
- (e) 380

Q22. $11\frac{1}{9}\% \text{ of } 873 - ? = \sqrt{2116}$

- (a) 60
- (b) 51
- (c) 55
- (d) 58
- (e) 49

Q23. $2\frac{4}{7} + 4\frac{1}{3} - 3\frac{2}{3} + \frac{16}{21} = ?$

- (a) 4
- (b) 5
- (c) 3
- (d) 7
- (e) 6

Q24. $(14 \times 5)\% \text{ of } 770 + 110 \times 11 = ?$

- (a) 1449
- (b) 1749
- (c) 1849
- (d) 1959
- (e) 2039

Q25. $\sqrt[3]{8000} \times 40\sqrt{400} \div 20 + 350 = ?$

- (a) 1340
- (b) 1370
- (c) 1266
- (d) 1150
- (e) 1157

Q26. $520\% \text{ of } 200 + 115 \times \frac{2}{5} - 246 = ?$

- (a) 840
- (b) 940
- (c) 1040
- (d) 1339
- (e) 740

Q27. $\sqrt{256 \times 81 \times 4} - 160 \times 2.5 + 400 = ?$

- (a) 248
- (b) 348
- (c) 358
- (d) 288
- (e) 378

Q28. $30 \div \frac{5}{12} + \sqrt{144} \times 20 = ?$

- (a) 118
- (b) 156
- (c) 208
- (d) 256
- (e) 312

Q29. $\sqrt{360 - 225 \times 2 + 379} = ?$

- (a) 17
- (b) 19
- (c) 27
- (d) 13
- (e) 23

Q30. $9^3 \times 81^2 \div 27^3 = (3)^?$

- (a) 3
- (b) 4
- (c) 5
- (d) 6
- (e) 8

Directions (31-35): What should come in place of the question mark (?) in the following number series.

Q31. 5, 12, 39, 160, ?, 4836

- (a) 850
- (b) 750
- (c) 800
- (d) 805
- (e) 820

Q32. 8, 27, 64, 125, ?, 343

- (a) 216
- (b) 222
- (c) 210
- (d) 207
- (e) 225

Q33. 12, 56, 221, 661, ?, 1321

- (a) 1320
- (b) 1322
- (c) 1321
- (d) 1323
- (e) 1325

Q34. 151, 159, 168, 232, ?, 473

- (a) 354
- (b) 260
- (c) 357
- (d) 257
- (e) none of these

Q35. 79, 104, 136, 176, 225, ?

- (a) 290
- (b) 285
- (c) 294
- (d) 274
- (e) 284



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Solutions

S1. Ans.(e)

Sol.

let actual SP be Rs. x

New selling price = Rs. $\frac{4x}{5}$

Let CP be Rs. y

$$\text{ATQ, } \frac{\frac{4x}{5} - y}{y} = \frac{20}{100} = \frac{1}{5}$$

$$\frac{4x}{5} - y = \frac{y}{5}$$

$$\frac{y}{x} = \frac{2}{3}$$

When article sold at actual selling price,

$$\text{Profit percentage} = \frac{x-y}{y} \times 100 = \frac{\frac{3y}{2} - y}{y} \times 100 = 50\%$$

S2. Ans.(a)

Sol.

$$\text{ATQ, } \frac{x \times 14 \times 3}{100} - \frac{x \times 10 \times 3}{100} = 120$$

$$\frac{(42-30)x}{100} = 120$$

$$x = \text{Rs. } 1000$$

$$\text{Required answer} = 5x = 5 \times 1000 = \text{Rs. } 5000$$

S3. Ans.(b)

Sol.

$$1 \text{ day wage of 4 men \& 3 children} = \frac{600}{3} = \text{Rs. } 200$$

Let efficiency of a man & a child be M & C units/day respectively

Equating total work,

$$(4M + 3C) \times 3 = M \times 15$$

$M:C = 3:1$ (this is also ratio of daily wage)

$$\text{Daily wage of a man} = \frac{3}{15} \times 200 = \text{Rs. } 40$$

S4. Ans.(c)

Sol.

Let leak empty it in x hr, then

$$\frac{1}{15} - \frac{1}{x} = \frac{1}{18}$$

$$\frac{1}{x} = \frac{1}{15} - \frac{1}{18}$$

$$x = 90 \text{ hrs}$$

S5. Ans.(c)

Sol.

let the smallest odd number be 'a' so next odd number be 'a+2' and so on

$$8^{\text{th}} \text{ number} = a + (8 - 1) \times 2 = a + 14 \text{ (using AP, nth term} = a + (n-1) d \text{)}$$

$$\text{ATQ, } \frac{a+a+2+\dots+a+14}{8} = 10$$

$$8a + 56 = 80 \text{ (Using sum of AP)}$$

$$a = \frac{80-56}{8} = 3$$

Since 'a' is smallest number, so smallest 4 numbers will be = 3, 5, 7, 9

$$\text{Required average} = \frac{3+5+7+9}{4} = 6$$

S6. Ans.(c)

Sol.

Let son's present age = x years

Then, person's present age = (x+16) year

After 2 yrs, (x+16)+2 = 2(x+2)

$$x + 18 = 2x + 4$$

$$x = 14 \text{ years}$$

Hence, son's age after 8 years = 14+8 = 22 yrs

S7. Ans.(b)

Sol.

Let the length(l) and breadth(b) of the rectangle be 20x and 10y respectively.

$$\text{Area of the rectangle} = l \times b = 20x \times 10y = 200xy$$

When length and breadth of the rectangle is increased by 20% and 10% respectively,

then new length and new breadth of rectangle will be $24x$ and $11y$ respectively

new area of rectangle = $24x \times 11y = 264xy$

$$\% \text{ Increase in area of the rectangle} = \frac{264xy - 200xy}{200xy} \times 100 = 32\%$$

S8. Ans.(b)

Sol.

The container is full of 75 liters milk

$$\text{Required quantity of milk} = 75 \left(1 - \frac{15}{75}\right)^3$$

$$= 75 \left(1 - \frac{1}{5}\right)^3$$

$$= 38.4 \text{ liters}$$

S9. Ans.(b)

Sol.

Ratio in which profit is distributed between Aakash and Vikash = $(x + 2000) : (x + 3000)$

$$\frac{x+2000}{x+3000} = \frac{28000-16000}{16000}$$

$$\Rightarrow \frac{x+2000}{x+3000} = \frac{3}{4}$$

$$4x + 8000 = 3x + 9000$$

$$\Rightarrow x = \text{Rs. } 1000$$

S10. Ans(b)

Sol.

$$\text{Downstream speed} = \frac{36}{4} = 9 \text{ km/hr}$$

$$\text{Speed of the current} = \frac{1}{2} \times 9 = 3 \text{ km/hr}$$

$$\text{Speed of the boat} = 9 - 3 = 6 \text{ km/hr}$$

$$\text{Now, Upstream speed} = 6 - 3 = 3 \text{ km/hr}$$

$$\text{Total time taken} = \frac{78}{3} = 26 \text{ hr}$$

S11. Ans.(d)

Sol.

$$\text{I. } x^2 - 11x + 28 = 0$$

$$x^2 - 7x - 4x + 28 = 0$$

$$x(x - 7) - 4(x - 7) = 0$$

$$(x - 7)(x - 4) = 0$$

$$x = 7, 4$$

$$\begin{aligned} \text{II. } y^2 - 15y + 56 &= 0 \\ y^2 - 7y - 8y + 56 &= 0 \\ y(y - 7) - 8(y - 7) &= 0 \\ (y - 7)(y - 8) &= 0 \\ y &= 8, 7 \\ x &\leq y \end{aligned}$$

S12. Ans.(e)

Sol.

$$\text{I. } x^2 = 144$$

$$x = \pm 12$$

$$\text{II. } y^2 - 22y + 121 = 0$$

$$(y - 11)^2 = 0$$

$$y = 11$$

So, no relation.

S13. Ans.(a)

Sol.

$$\text{I. } x^2 - 18x + 45 = 0$$

$$x^2 - 15x - 3x + 45 = 0$$

$$x(x - 15) - 3(x - 15) = 0$$

$$x = 3, 15$$

$$\text{II. } y^2 + 17y + 72 = 0$$

$$y^2 + 9y + 8y + 72 = 0$$

$$y(y + 9) + 8(y + 9) = 0$$

$$y = -8, -9$$

So, $x > y$

S14. Ans.(d)

Sol.

$$\text{I. } x^2 = 289$$

$$x = 17, -17$$

$$\text{II. } (y - 17)^2 = 0$$

$$y = 17$$

So, $x \leq y$

S15. Ans.(b)

Sol.

$$I. x^2 + 8x + 7x + 56 = 0$$

$$x(x-8) + 7(x-8) = 0$$

$$x = -8, -7$$

$$II. y^2 + 16y + 64 = 0$$

$$y^2 + 8y + 8y + 64 = 0$$

$$y(y+8) + 8(y+8) = 0$$

$$y = -8, -8$$

So, $x \geq y$

S16. Ans.(a)

Sol.

$$\text{Required percentage} = \frac{40-32}{40} \times 100 = 20\%$$

S17. Ans.(c)

Sol. Required sum = $(28 + 12) + (38 + 15) = 93$

S18. Ans.(c)

Sol.

$$\text{Required average} = \frac{50+32+38}{3} = 40$$

S19. Ans.(b)

Sol.

Let total reels shared by T = x

So, total photos shared by T = $(x + 4)$

ATQ -

$$x + x + 4 = 44$$

$$2x = 40$$

$$x = 20$$

S20. Ans.(a)

Sol.

$$\text{Total photos shared by Q} = 28 \times \frac{5}{14} = 10$$

S21. Ans.(a)

Sol.

$$? = 1200 - 920$$

$$?=280$$

S22. Ans.(b)

Sol.

$$\frac{1}{9} \times 873 - 46 = ?$$

$$? = 97 - 46$$

$$? = 51$$

S23. Ans.(a)

Sol.

$$? = (2 + 4 - 3) + \left(\frac{4}{7} + \frac{1}{3} - \frac{2}{3} + \frac{16}{21}\right)$$

$$? = 3 + 1$$

$$? = 4$$

S24. Ans.(b)

Sol.

$$70 \times \frac{770}{100} + 1210 = ?$$

$$539 + 1210 = ?$$

$$? = 1749$$

S25. Ans.(d)

Sol.

$$20 \times 40 \times 20 \times \frac{1}{20} + 350 = ?$$

$$? = 1150$$

S26. Ans.(a)

Sol.

$$520 \times \frac{200}{100} + 46 - 246 = ?$$

$$1040 + 46 - 246 = ?$$

$$? = 840$$

S27. Ans.(d)

Sol. $16 \times 9 \times 2 - 400 + 400 = ?$

$$? = 288$$

S28. Ans.(e)

Sol.

$$30 \times \frac{12}{5} + 12 \times 20 = ?$$

$$? = 312$$

S29. Ans.(a)

Sol.

$$\sqrt{360 - 450 + 379}$$

$$? = \sqrt{289} = 17$$

S30. Ans.(c)

Sol.

$$3^? = (3^2)^3 \times (3^4)^2 = 3^6 \times 3^8 \div 3^9 = 3^5$$

$$\text{Or, } ? = 5$$

S31. Ans.(d)

Sol.

Pattern of series -

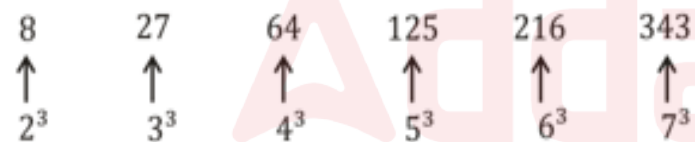


Hence, missing term is 805.

S32. Ans.(a)

Sol.

Pattern of series -

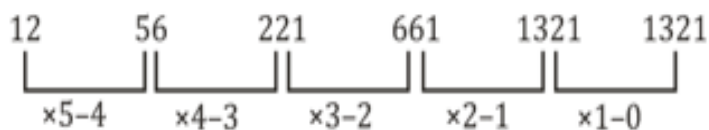


Hence, missing term is 216.

S33. Ans.(c)

Sol.

Pattern of series -

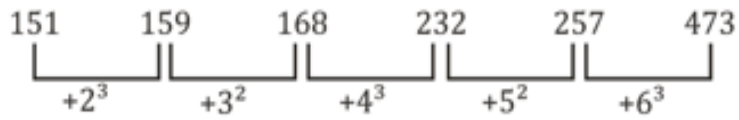


Hence, missing term is 1321.

S34. Ans.(d)

Sol.

Pattern of series -

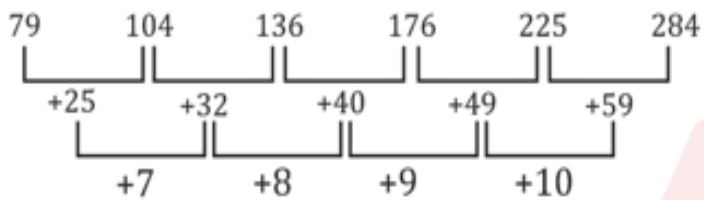


Hence, missing term is 257.

S35. Ans.(e)

Sol.

Pattern of series -



Hence, missing term is 284.

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