Bipin Nambiar
(SBI PO 2018)
Shiraz Khan
(SBI Clerk 2018)
Kuldeep Yadav
(SBI PO 2018)
Rajat Saxena
(IBPS Clerk 2018)
Anupam Tyagi
(IBPS PO 2018)
FRIENDS!
WE USED TESTZONE
AND CRACKED BANK EXAMS
बैंक परीक्षाओ के लिए निश्चित
रूप से सर्वश्रेष्ट मॉक
टेस्ट सीरीज
IT'S YOUR TURN NOW
TAKE A FREE MOCK TEST
Smartkeeda
The Question Bank

Mixed Maths Questions for SBI Clerk Pre, IBPS Clerk Pre, LIC Asst. Pre, RBI Asst. Pre and IBPS RRB Exams.

SBI Clerk Pre Quant Quiz 10

Directions : Read the following questions carefully and choose the right answer.

1. If the digits of a two digit number are interchanged the number so obtained is greater than the original number by 18. If the sum of the two digits of the number is 8, find 55% of the original number?

A. 19.25 B. 9.35 C. 14.3 D. 29.15 E. 34.10

2. Amit sells a computer to Bhanu at a loss of 10% who sells it to Charan at a profit of 20%. After finding some defect Charan returned it back to Bhanu but could only recover Rs. 4 for every Rs. 5 he had paid. If Amit had paid Rs. 90,000 for the computer, then find the amount received by Charan while returning the computer to Bhanu.

A. Rs. 18440 B. Rs. 19440 C. Rs. 77760 D. Rs. 67500 E. None of these

3. The perimeter of a rectangle is equal to the perimeter of a square whose diagonal is $17\sqrt{2}$ m. If the difference between the length and breadth of rectangle is 10m, find the area of the rectangle?

A. 260 m^2 B. 264 m^2 C. 210 m^2 D. 230 m^2 E. 245 m^2

4. Ronny and Pankaj spent 70% and 75% of their respective salaries. Pankaj kept 60% of the remaining as savings and gave the remaining Rs. 5100 to his mother. What was Ronny's monthly expenditure if his monthly salary was 20% less than that of Pankaj?

A. Rs. 71400 B. Rs. 28560 C. Rs. 62340 D. Rs. 24400 E. Rs. 50460

5. The expenses on food, rent and electricity of a family are in the ratio 5 : 15 : 3. The expenditure on food, rent and electricity is increased by 20%, 10% and 30% respectively. The total expenses of family thus increased by how much percent.

A. $12\frac{18}{23}\%$ B. $11\frac{17}{21}\%$ C. $14\frac{18}{23}\%$ D. $24\frac{11}{21}\%$ E. $15\frac{17}{23}\%$

SmartKeeda
The Question Bank

For more PDFs join us on Telegram
CLICK HERE
SBI | RBI | IBPS | RRB | SSC | NIACL | EPFO | UGC NET | LIC | RAILWAY | CLAT | RJS

6. **The age of Rudra is x years. The age of Aarav and Viraaj is (x + 5) and (x – 2) years, respectively. After 2 years, Aarav's age will be 11/6 times the age of Rudra's age. 2 years hence, find the ratio of the age of Aarav and Viraaj ?**

A. 4 : 3 B. 11 : 4 C. 13 : 6 D. 12 : 5 E. None of these

7. **Tanu invested 50% more than Heena, Heena invested 20% less than Jaya. If the total sum of their investments is Rs. 30000, how much amount did Jaya invest?**

A. Rs. 9520 B. Rs. 11500 C. Rs. 11000 D. Rs. 9500 E. Rs. 10000

8. **Find the number of ways in which 8 different books can be arranged on a shelf so that 3 particular books shall not be together.**

A. 28500 B. 36100 C. 26000 D. 36000 E. None of these

9. **A student was asked to multiply a number by 5/4 but he divided that number by 5/4. His result was therefore 27 less than the correct answer. Find the number.**

A. 48 B. 60 C. 45 D. 42 E. None of these

10. **85 litres of mixture of milk and water contains 25 litres milk more than water. 15 litres of water is added to it. The ratio of milk to water in the final mixture is**

A. 9 : 8 B. 10 : 9 C. 9 : 11 D. 11 : 9 E. None of these

SmartKeeda
The Question Bank

For more PDFs join us on Telegram
CLICK HERE
SBI | RBI | IBPS | RRB | SSC | NIACL | EPFO | UGC NET | LIC | RAILWAY | CLAT | RJS

Correct Answers:

1	2	3	4	5	6	7	8	9	10
A	C	B	B	C	B	E	D	B	D

Explanations:

1. The two digits in which the sum of the digits is 8 are 17, 26, 35, 44.

Here, 53 – 35 = 18

So the original number is 35.

55% of the original number = $\frac{55 \times 35}{100}$ = 19.25

Hence, option A is correct.

2. Let the cost price for Amit be Rs. 100

	Amit	Bhanu	Charan
Cost price	100x	90x	108x
Selling price	90x (since loss is 10%)	108x (since profit is 20%)	

Charan got Rs. 4 instead of Rs. 5.

His loss% = $\frac{(5-4) \times 100}{5}$ = 20%

Selling price for Charan = 108(0.8)x = 86.4x

100x corresponds to Rs. 90,000

86.4x corresponds to $\frac{90000 \times 86.4x}{100x}$ = 77760

Hence, option C is correct.

SmartKeeda
The Question Bank

For more PDFs join us on Telegram
CLICK HERE
SBI | RBI | IBPS | RRB | SSC | NIACL | EPFO | UGC NET | LIC | RAILWAY | CLAT | RJS

3. The diagonal of the square = a√2

a√2 = 17√2

a = 17

Perimeter of the square = 17 × 4 = 68 m

Perimeter of the rectangle = 68 m

L – B = 10

2(L+B) = 68

L + B = 34

By solving equations we get,

L = 22 m, B = 12 m

Area of the rectangle = 22 × 12 = 264 m^2

Hence, option B is correct.

SmartKeeda
The Question Bank

4. Let the monthly salary of Pankaj be 100%

He spends 75% and saves 25%

He keeps 60% of 25% i.e., 15% as savings.

The remaining i.e., 40% of 25% = 10%

He gives 5100 i.e., 10% to his mother.

The value of 10% of his salary = 5100

Value of 100% = 51000

Pankaj's salary = Rs. 51000

Monthly salary of Ronny is 20% less than that of Pankaj.

$$\text{Monthly salary of Ronny} = \frac{51000 \times 4}{5} = \text{Rs. } 40800$$

$$\text{Ronny's monthly expenditure} = \frac{40800 \times 7}{10} = \text{Rs. } 28560$$

Hence, option B is correct.

5. The expenses on food, rent and electricity of a family are in the ratio 5 : 15 : 3 respectively.

Let the expenses on food, rent and electricity be Rs. 5 , Rs. 15, Rs. 3 respectively
Increase on food → 20% on 5 i.e., Rs. 1
Increase on rent → 10% on 15 i.e., Rs. 1.5
Increase on electricity → 30% on 3 i.e., Rs. 0.90

Total increase in expenses = Rs. (1 + 1.50 + 0.90)

$$\text{Reqd. \%} = \frac{(1 + 1.50 + 0.90) \times 100}{5 + 15 + 3} = \frac{340}{23}\% = 14\frac{18}{23}\%$$

Hence, option C is correct.

6. The present age of Rudra, Aarav and Viraaj is x, (x + 5) and (x – 2) year respectively.
After 2 years, Aarav's age will be 11/6 times the age of Rudra's age,

$$x + 7 = \frac{11\,(x + 2)}{6}$$

$$6x + 42 = 11x + 22$$

$$x = 4$$

Aarav's age 2 years hence = x + 5 + 2 = 11 years
Viraaj's age 2 years hence = x – 2 + 2 = 4 years

$$\text{Reqd. ratio} = \frac{11}{4}$$

Hence, option B is correct.

7. Let Jaya's investment be Rs. 100x

$$\text{Then, Heena's investment} = 100x \times \frac{80}{100} = \text{Rs. } 80x$$

$$\text{And Tanu's investment} = \frac{150}{100} \times 80x = \text{Rs. } 120x$$

Ratio of Jaya's investment : Ratio of Heena's investment : Ratio of Tanu's investment = 100x : 80x : 120x = 5 : 4 : 6

$$\therefore \text{ Investment made by Jaya} = \frac{5}{15} \times 30000 = \text{Rs. } 10000$$

Hence option E is correct.

SmartKeeda
The Question Bank

8. Number of ways in which 8 books can be arranged = 8!

Number of ways when three particular books are together = 6! X 3!

Therefore Number of ways when three particular books are not together = 8! – 6! X 3! = 6! (7 × 8 – 3 × 2)

= 6! × 50 = 720 × 50 = 36000

Hence, option D is correct.

9. **Traditional Approach :**

$$x \times \frac{5}{4} - \frac{x}{5/4} = 27$$

$$\Rightarrow \frac{5x}{4} - \frac{4x}{5} = 27$$

$$\Rightarrow \frac{25x - 16x}{20} = 27$$

$$\Rightarrow \frac{9x}{20} = 27$$

$$\therefore x = \frac{20 \times 27}{9} = 60$$

SmartKeeda
The Question Bank

Intuitive Approach :

In this question, it's given that when the student mistakenly divided the number by 5/4 the result was 27 less than the correct answer.

With this piece of info it's evident that neither option A nor option D could be the correct answer because neither of them is completely divisible by 5/4.
Taking option B; 60 now,

1st scenario,

$$60 \times \frac{5}{4} = 75 \quad ...(i)$$

2nd scenario

$$\frac{60}{5/4} = 48 \quad ...(ii)$$

We can observe that 48 is 27 less than 75 and it, thus, satisfies the given condition.
60 is hence the correct answer.
Hence, option B is correct.

10. Let water in the mixture be x litres.

$\therefore$ Milk = x + 25 litres Now, x + x + 25 = 85 or, 2x = 60

$\therefore$ x = 30 Thus, water = 30 litres Milk = x + 25 = 25 + 30 = 55 litres

After 15 litres of water is added to it,

water = 30 + 15 = 45 litres And milk = 55 litres

$\therefore$ Reqd. ratio = $\frac{55}{45}$ = 11 : 9

Hence option D is correct.

SmartKeeda
The Question Bank
For more PDFs join us on Telegram
CLICK HERE
SBI | RBI | IBPS | RRB | SSC | NIACL | EPFO | UGC NET | LIC | RAILWAY | CLAT | RJS

SmartKeeda

The Question Bank

Presents

TestZone

India's least priced Test Series platform

JOIN

ALL BANK EXAMS

2020-2021 Test Series

@ Just

₹599/-

300+ Full Length Tests

- ☑ Brilliant Test Analysis
- ☑ Excellent Content
- ☑ Unmatched Explanations

JOIN NOW