

Data Sufficiency Questions for Bank Exams

Data Sufficiency Quiz 2

Directions: Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and give answer:

- 1. What is the present age of Rahul?
- I. At the time of marriage Rahul's age was 25 years.
- II. The average age of Rahul and Rahul's wife at the time of marriage was 24 years.
- III. The difference between the present ages of Rahul and his son is 24 years.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.
- 2. What is the ratio of the volume of the cube to the volume of the cuboid?
- I. The Total Surface Area of the cuboid is 352 cm2 and the ratio of the length, breadth and height of the cuboid is 3 : 2 : 1.
- II. The Total Surface Area of the cube is 726 cm2.
- III. The length of the cuboid is 1.5 times of the breadth of the cuboid and 3 times of the height of the cuboid. The difference between the height and the length of the cuboid is 8cm.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.

- 3. Find the rate of simple interest per annum.
- I. Meetu borrowed Rs 9000 from Sneha for two years on simple interest.
- II. Meetu returned Rs 11700 to Sneha at the end of two years and settled the loan.
- III. A sum of money becomes double in 20/3 years on simple interest.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II aand III is not sufficient to answer the question.
- B. The data in statements II aand III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.
- 4. In a family there are 5 members, Nidhi, Vidhi, Nitya, Ajay and Anil. Find the present age of Anil.
- I. The average age of five family members is 36 years.
- II. The total age of Nidhi, Vidhi and Anil is 75 years.
- III. The present age of Anil is 12 years more than the age of Ajay.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.
- 5. Find the value of x.
- I. 2xyz + 6y 8z + 5 = 0, z = 1
- II. $y = \sqrt{225 116}$
- III. 4xyz 6z + 8y 7 = 0, z = 3
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.

- 6. At what time will the train reach point X from point Y?
- I. The train crosses another train of equal distance of 250 m in 25 sec. running opposite direction.
- II. The train of 250 m crosses a signal pole in 10 sec.
- III. The distance between point X and point Y is 360 km.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.
- 7. Karina and Katrina invested some money in a business in the ratio of 4 : 5. At the end of year find the difference between the profits of Karina and Katrina.
- I. Karina invested money for the whole year and Katrina invested money for 8 months.
- II. The total profit earned by both at the end of the year is Rs 22000.
- III. At the end of the year Karina earned Rs 12000.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.
- 8. In an examination some students appeared for the examination. How many students cleared the exam?
- I. 35% of the students failed in the exams.
- II. The difference between the students who cleared the exam and failed in exam is 240.
- III. The ratio of the boys and girls who appeared for the examination is 4 : 5.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.

- 9. Find the two digit number.
- I. The product of the two digits of the two digit number is 20.
- II. The difference between the two digits of the two digit numbers is 1.
- III. The sum of the two digits of the two digit numbers is 9.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.
- **10.** How much is monthly profit of a company?
- I. Company decided to give bonus with the salary to its employees. Bonus is 12% of the monthly profit of the company.
- II. On the day of salary distribution, company changed its mind and gave a total of Rs.24000 as bonus which was 125% of what the company had decided earlier.
- III. Company gives an amount of Rs.15000 as bonus which is 3/4th of total monthly profit.
- A. The data in statements I alone is sufficient to answer the question, while the data in statement II and III is not sufficient to answer the question.
- B. The data in statements II and III is sufficient to answer the question, while the data in statement I is not sufficient to answer the question.
- C. The data in statements I and II or in statement II and III is sufficient to answer the question.
- D. The data in all the statements I, II and III is not sufficient to answer the question.
- E. The data in all the statements I, II and III together is necessary to answer the question.

Correct Answers:

1	2	3	4	5	6	7	8	9	10
D	С	С	D	С	В	С	А	D	А

Explanations:

1. Statement I:

The age of Rahul at the time of marriage = 25 years.

Statement I alone is not sufficient to answer the question.

Statement II:

Total age of Rahul and his wife at the time of marriage = $24 \times 2 = 48$ years.

Statement II alone is not sufficient to answer the question.

Statement III:

Difference between the ages of Rahul and his son = 24 years.

Statement III alone is not sufficient to answer the question.

All the statements are not sufficient to answer the question because in these statements it is not given that when Rahul got married

Hence, option D is correct.

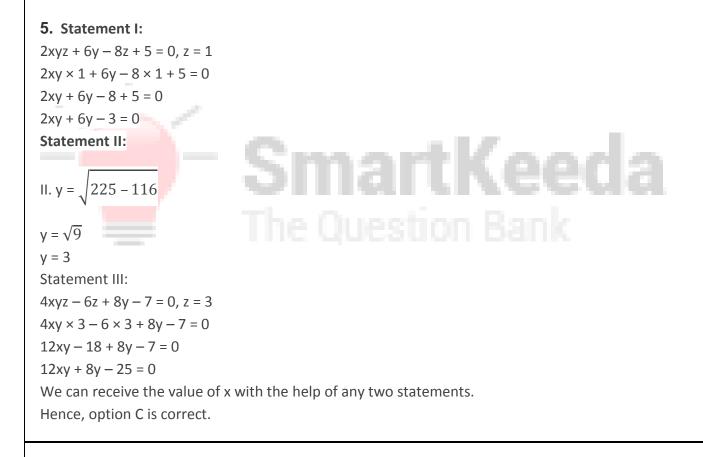
2. Statement I:

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Total Surface Area of cuboid = 2(lb + bh + hl)
Let length = 3x, breadth = 2x, height = x
352 = 2 (3x \times 2x + 2x \times x + x \times 3x)
176 = (6x^2 + 2x^2 + 3x^2)
176 = 11x^2
x^2 = 16
x = 4
Length = 12cm, Breadth = 8cm, Height = 4cm
Volume = lbh
= 12 \times 8 \times 4 = 384 cm<sup>3</sup>
Statement II:
Total Surface Area of cube = 6s^2
384 = 6s^2
s^2 = 64
s = 8 cm
Volume of the cube = s^3
= 8^3 = 512 \text{ cm}^3
Statement III:
Height of the cuboid = x \text{ cm}, length = 3x, breadth = 2x
Difference = 3x - x
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8 = 2x x = 4length = 12cm, breadth = 8cm, height = 4cm Volume = lbh $= 12 \times 8 \times 4 = 384$ cm³ We can solve this question with the help of either statement I and II or statement II and III. Hence, option C is correct.

3. Statement I: Principal = Rs 9000 Interest = $\frac{\text{Principal} \times \text{Rate} \times \text{time}}{2}$ 100 $2700 = \frac{9000 \times \text{Rate} \times 2}{100}$ $\frac{2700}{180}$ = Rate Statement I alone is not sufficient to give the answer. Statement II: Amount = Rs 11700 Statement II alone is not sufficient to give the answer. Statement I + Statement II: Principal = Rs 9000, Amount = Rs 11700, time = 2 years, Interest = 11700 - 9000 = Rs 2700 Rate = 15% Data in Statement I and II is sufficient to give the answer. Statement III: Let Principal = Rs x, Amount = Rs 2x, time = 20/3 years, interest = 2x - x = Rs xInterest = $\frac{\text{Principal} \times \text{Rate} \times \text{time}}{2}$ 100 $x = \frac{x \times Rate \times 20}{2}$ 300 Rate = 15% Statement III alone is sufficient to give the answer. Hence, option C is correct.

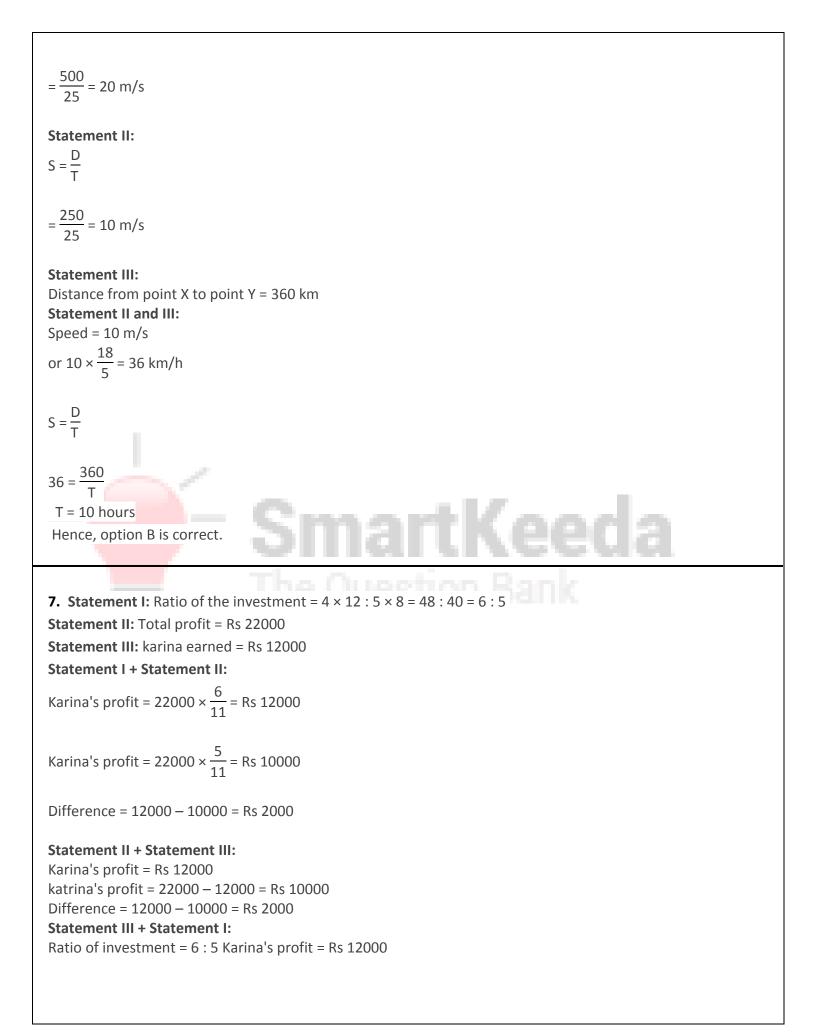
4. Statement I: Total age of five family member = $36 \times 5 = 180$ years Statement I alone is not sufficient to give the answer. Statement II: Total age of Nidhi, Vidhi and Anil = 75 years Statement II alone is not sufficient to give the answer. Statement III: Let the age of Ajay = x years Age of Anil = x + 12 years Statement III alone is not sufficient to give the answer. The data in statement I, II and III is not sufficient to give the answer. Hence, option D is correct.



6. Statement I:

Relative Speed = $\frac{D}{T}$

 $S1 + S2 = \frac{250 + 250}{25}$



Karina's profit = $\frac{12000}{6} \times 5$ = Rs 10000 Difference = 12000 - 10000 = Rs 2000 Hence, option C is correct.

8. Let the total students = x Statement I: Failed students = $x \times 35\%$, Passed students = $x \times 65\%$ Statement II: Difference between failed and passed students = 240 Statement III: Ratio of Boys and Girls = 4 : 5 Statement I + Statement II: $x \times 65\% - x \times 35\% = 240$ $x \times 30\% = 240$ x = 800students who cleared the exam = 800 × 65% = 520 Statement I and II together is sufficient to answer the question. Hence, option A is correct. a second a second second second **9.** Let the two digit number is xy. Statement I: $x \times y = 20$ Statement I alone is not sufficient to give the answer. Statement II: x - y = 1 or y - x = 1Statement II alone is not sufficient to give the answer. Statement III: x + y = 9Statement III alone is not sufficient to give the answer. Statement I + Statement II: $x \times y = 20 \dots 1$ x - y = 1 or y - x = 1x = y + 1 or $y = x + 1 \dots 2$ After solving equation 1 and 2 x = 4 or 5, y = 4 or 5**Statement II + Statement III:** x - y = 1 or $y - x = 1 \dots 3$ $x + y = 9 \dots 4$

After solving equation 3 and 4 x = 5, y = 4 or x = 4, y = 5 **Statement I + Statement III:** $x \times y = 20 \dots 5$ $x + y = 9 \dots 6$ After solving equation 5 and 6 x = 4 or 5, y = 4 or 5 In all the cases we don't have the exact value two digit number so the data in all the statements is not sufficient to give the answer. Hence, option D is correct.

10. From I:

Company decided to give bonus with the salary to its employees.

Bonus is 12% of the monthly profit of company.

But here the amount of bonus is not given.

Hence, statement I alone is not sufficient.

From II:

On the day of salary distribution, company changed its mind and gave total of Rs.24000 as a bonus

Which was 125% of what the company had decided earlier.

Here the amount of bonus is given but change is given in per cent.

Hence, statement II alone is not sufficient.

From III:

Company gives an amount of Rs.15000 as bonus which is 3/4th of total monthly profit

So monthly profit of company = $\frac{15000 \times 4}{3}$ = Rs.20000

Hence, statement III alone is sufficient.

From I and II:

Bonus is 12% of the monthly profit and company gave total of Rs.24000 as a bonus Which was 125% of what the company had decided earlier.

New bonus = 125% of 12% of monthly profit = 24000 (Given)

Monthly profit = $\frac{24000 \times 100}{12} \times \frac{100}{125} = 160000$

Hence statements I and II together are sufficient.

Hence, option A is correct.

