Data Sufficiency Questions for IBPS PO Pre, RRB Scale I Pre, SBI PO Pre, Canara Bank PO, RBI Grade B, Syndicate Bank PO, IBPS SO Pre, IBPS Clerk Mains and SBI Clerk Mains Exams.

Data Sufficiency Quiz 10

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

1. What is the value of the two-digit number?

Statement I : The sum of the digits at unit's place and tenth's place is 13.
Statement II : When the digits are interchanged then the number obtained is 45 larger than the original number.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

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2. Can a water tank of 2500 litres capacity be filled by two inlet pipes A and B together in less than 8 hours?

Statement I : If pipe A is opened alone then it takes 12 hours to fill the tank.
Statement II : Pipe B can fill 1 litres of water per minute.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

3. How much time will Ram take to cover a distance of 100 km at a uniform speed?

Statement I : The speed of Mohan is 10 km per hour more than that of Ram.
Statement II : If Mohan increases his speed by 25% then he takes 3 hours 20 minutes less to cover a distance of 500 km.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

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4. What is the area of a right-angled triangle ABC?

Statement I : The length of sides AB and BC of the triangle is 12 cm and 9 cm respectively.
Statement II : The in radius of the triangle ABC is 3 cm, and the circumradius is 7.5 cm.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

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5. What is the sum of x and y?

Statement I: $15x + 4y = 108$
Statement II: $y = 27 - 3.75x$

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

6. Is triangle ABC a right angle tringle?

Statement I: The ratio of length of sides of AB to BC is 4 : 5
Statement II: The ratio of length of sides BC to AC is 12.5 : 6.5

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

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7. A sum of Rs. 120 was distributed among A, B and C. Who among the three got the highest share?

Statement I: The share of A was one - third of the share of B and C together.
Statement II: The share of C was 60% of the sum of the share of A and B together.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

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8. A train can cross a 600 meters platform in 30 seconds. What is the length of train?

Statement I: A man running at the speed of 20 meters per second in the opposite direction of train can pass the train completely in 6 seconds.
Statement II: The train can pass a boy standing on the platform in 10 second.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

9. At R% per annum a sum of money under simple interest become 3 times of itself in 20 years. What is the sum of money?

Statement I: If the rate of interest is doubled and the time remains constant then the simple interest will be Rs. 400 more.
Statement II: If the rate of interest is doubled and time tripled then the sum of money will become 13 times of itself.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

10. What is the age of three brothers A, B, and C?

Statement I: The product of their age is 30 years.
Statement II: The sum of any of two brothers' age is not divisible by 3.

A. The data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. The data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. Either Statement I or Statement II alone is sufficient to answer the question.
D. The data in both the statements I and II is not sufficient to answer the question.
E. The data in both the statements I and II together is necessary to answer the question.

Correct Answers:

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

Explanations:

1. Let the two-digit number = ab = 10a + b

From the statement, I, we can conclude that, a + b = 13

From the statement II, we can conclude that, 10b + a = 10a + b + 45

9(b – a) = 45

If we solve the both the equation then we can get our answer as 49

Therefore, the data in both the statements I and II together is necessary to answer the question

Hence, option E is correct.

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2. From the statement I, the efficiency of pipe A per hour

$= \frac{2500}{12} = \frac{625}{3}$ litres per hour

From the statement II, the efficiency of pipe B = 1 × 60 = 60 litres per hour

Pipe A and B together will fill in 1 hour

$= \frac{625}{3} + 60 = \frac{805}{3}$ litres per hour

The time it will take to fill 2500 litres of water = more than 8 hours, therefore answer will be no

Therefore, the data in both the statements I and II together is necessary to answer the question

Hence, option E is correct.

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3. Let the speed of ram = x km per hour

Then the speed of Mohan = y km per hour

From the statement I, y = x + 10

From the statement II, we can find the value of y as 30 , so speed of Mohan is 30 km per hour

By combining both the statement, we can get the value of x as well which is 20 km per hour

So Ram will take 5 hours to cover 100km at a speed of 20 km per hour

Hence, option E is correct.

4. From the statement I, AB = 12 cm

BC = 9 cm but we could not conclude which of the angle is right angle therefore we could not get unique answer only by the statement I.

From the statement II, let the sides of the triangle = a, b, and c where c is hypotenuse

Then, in radius = $\frac{a + b - c}{2} = 3$

And, circumradius = $\frac{\text{hypotenuse}}{2} = \frac{c}{2} = 7.5$, c = 15 cm

a + b = 21

By the Pythagorean theorem we can calculate the value of a and b, after that we can conclude the area.

Therefore, the data in statements II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.

Hence, option B is correct.

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5. From the statement I, 15x + 4y = 108 ----- (i)

From the statement II, y = 27 – 3.75x

4y + 15x = 108 ----- (ii)

Here, both the equations are same it means we have two variable and one equation therefore we could not conclude the value of two variable from one equation.

Therefore, the data in both the statements I and II is not sufficient to answer the question.

Hence, option D is correct.

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6. From the statement, AB : BC = 4 : 5

From the statement II, BC : AC = 25 : 13

By both the statement, AB : BC : CA = 20 : 25 : 13

Therefore, by combining both the statement, we can conclude that the given triangle is not a right-angle triangle.

Hence, option E is correct.

7. From the statement I, 3A = B + C ..... (I)

From the statement II, 5C = 3(A + B) ..... (II)

From the question, A + B + C = 120 ..... (iii)

If we solve the three equation then A = 30, B = C = 45

In question, we need to conclude who among the three got the highest share here our answer can be B or C therefore we can not conclude the unique answer.

Hence, option D is correct.

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8. Let the speed of the train = x m/sec and the length of train = y meters

From the question, 30 × x = y + 600 (distance = speed × time)

From the statement I, y = (x + 20) × 6

From the statement II, y = x × 10

We have 2 variable and three equation, we can conclude the value of y by either of 2 equations.

x = 30 and y = 300

Hence, option C is correct.

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9. Let the sum of money = x then SI = 3x – x = 2x

$$2x = \frac{x \times R \times 20}{100}$$

R = 10%

From the statement I, we can conclude that,

$$\frac{2r \times x \times 20}{100} = 400 + 2x$$

x = 200

From the statement II, we can conclude only rate of interest which we can conclude by question itself.

Therefore, the data in statements I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.

Hence, option A is correct.

10. From the statement I,

30 = 1 × 2 × 15 or 2 × 3 × 5 therefore, only from the statement I, we could not conclude the answer.

From the statement II, if 1, 2, 15 then the sum will be divisible by 3 i.e. (1 + 2) = 3

But, if 2, 3, and 5 then the sum of any of pairs will not be divisible by 3

Therefore, from both the statement, we can conclude that the age of three brothers is 2, 3, and 5 years.

Hence, option E is correct.