Generated Questions - 20250403_141103

Question 1:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: Statement (1) tells us that x is greater than 0.4, and statement (2) indicates that x is less than 0.6. Together, these statements tell us that x falls within the range (0.4, 0.6), which means we cannot definitively conclude that x is less than 0.5. Therefore, both statements together are needed, but neither is sufficient alone.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 2:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: D

Explanation: Both statements provide the same information leading to the conclusion that y equals 1.0. From statement (1), y = 0.75 + 0.25 = 1.0, and from statement (2), y = 1.0 - 0.25 = 0.75, leading to y = 1.0. Hence, each statement alone is sufficient.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 3:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: B

Explanation: Statement (2) indicates that z equals 0.3333..., which is a repeating decimal. Statement (1) does not provide sufficient information to determine whether z is a repeating decimal or not, as it could also represent a terminating decimal. Thus, only statement (2) is sufficient.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 4:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: From Statement (1), we can solve for x: x = 3/4 - 1/2 = 1/4. From Statement (2), we find x = 1/4 + 1/4 = 1/2. Thus, only Statement (1) provides a unique value for x.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 5:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: B

*Explanation: From Statement (2), we can find y = (1/3) * 2 = 2/3. Statement (1) can be manipulated to find y, but requires additional steps. Therefore, Statement (2) alone is sufficient.*

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 6:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: B

Explanation: From Statement (2), we have a = 1/4 and b = 1/3, so a/b = (1/4) / (1/3) = 3/4. Statement (1) does not provide a direct way to find a/b without additional information.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 7:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: From Statement (1), x = 3/4 - 1/2 = 1/4. From Statement (2), x = 1/6 + 1/3 = 1/2. Since both statements provide different values for x, we need them together to confirm that x is not uniquely determined by either statement alone.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 8:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: Both statements together tell us that x is between 0.5 and 1.5, which means we have a range, but we cannot determine a specific value for x. Thus, we can conclude that both statements combined give us sufficient information about the range of x.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 9:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: Statement (1) provides that y squared equals 0.36, which gives us two possible values for y: 0.6 and -0.6. Statement (2) indicates that y is negative, thus confirming that y must be -0.6. Therefore, statement (1) is sufficient alone.

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Question 10:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: Statement (1) gives z as 3/4, which is equal to 0.75, confirming that it is not greater than 0.75. Statement (2) alone does not give a specific value for z. Therefore, statement (1) alone is sufficient to answer the question.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 11:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: Statement (1) directly provides that x = 0.75, which is greater than 0.5, making it sufficient. Statement (2) does not provide a definitive answer since x could be less than or equal to 0.5, thus is not sufficient on its own.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 12:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: From Statement 1, we can express a as 3b. Using Statement 2, we can substitute this into the equation a + b = 24, leading to 3b + b = 24, resulting in 4b = 24, thus b = 6 and a = 18. Therefore, both statements together are sufficient to find the value of the fraction a/b = 18/6 = 3.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 13:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: Statement 1 indicates that x > 3y, which implies that x/y > 3, thus confirming that the fraction is greater than 1. Statement 2 does not provide any information about the relationship between x and y, hence it is insufficient alone.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 14:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: From Statement 1, substituting a = 6 and b = 5 into the expression gives 2(6)/(3(5) - 6) = 12/(15 - 6) = 12/9 = 4/3. Statement 2 does not provide any specific values for a or b, so it is insufficient alone.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 15:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: From Statement 1, we know x = 3y. From Statement 2, we know x + y = 12. Substituting x in the second equation gives 3y + y = 12, so 4y = 12, thus y = 3 and x = 9. Therefore, x/y = 9/3 = 3. Both statements together allow us to find x/y, but neither alone is sufficient to find the value of the fraction.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 16:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: Both statements together indicate that x is between 1/2 and 3/4, which allows us to deduce that x is a fraction but does not specify its exact value. Therefore, both statements are needed to conclude the range of x.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 17:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: A

Explanation: From Statement 1, since a = 3b, the fraction a/b = 3, which is greater than 1. Statement 2 alone does not provide enough information about the relationship between a and b. Hence, Statement 1 alone is sufficient.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 18:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: Statement 1 gives the fractions but not their values. Statement 2 provides specific values for x, y, z, and w, allowing us to calculate the fractions. Together, they enable us to find the sum, but neither is sufficient alone. Thus, both statements together are necessary.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 19:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: From Statement 1, we have a = (3/4)b, thus a/b = 3/4. From Statement 2, we get b = (2/3)a, leading to a/b = 3/2. Each statement gives us different values for a/b individually, but together they allow us to confirm the relationships needed to find the value of a/b. Therefore, both statements together are sufficient to determine the values but neither alone is sufficient.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Fractions (DS)

Question 20:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: B

Explanation: Statement (2) provides a direct equation that can be solved for x, while statement (1) does not provide enough information to determine the value of x independently.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 21:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: Neither statement alone provides enough information to compute the exact sum. However, together they confirm the range of the values, allowing us to conclude that 3.75 + 1.25 can be computed as 5.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)

Question 22:

A. Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient.

B. Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient.

C. BOTH statements TOGETHER are sufficient, but NEITHER statement ALONE is sufficient.

D. EACH statement ALONE is sufficient.

E. Statements (1) and (2) TOGETHER are NOT sufficient.

Correct Answer: C

Explanation: Statement (1) provides a general rule about products of decimals but does not provide the exact values needed to calculate the product. Statement (2) clarifies the values but does not allow for direct calculation. Together, they confirm that both decimals can be multiplied to find the product.

Metadata: section: Data Insights, subsection: Data Sufficiency, topic: Arithmetic DS, subtopic: Decimals (DS)