

Problems on Data Sufficiency

Question 10

What is the distance between two cities X and Y? City Z is 60 miles due south of city X.

- (1) The distance between cities Y and Z is 80 miles.
- (2) City Z is due west of city Y.

Question 11

What is the average (arithmetic mean) of x and y ?

- (1) The arithmetic mean of $(x + 1)$ and $(y - 1)$ is equal to the arithmetic mean of x and y .
- (2) The arithmetic mean of x , y and -1 is 1 .

Question 12

Is the perimeter of a given rectangle greater than 10 inches?

- (1) The length of the rectangle is 2 inches greater than the width.
- (2) The two shorter sides of the rectangle are 2.5 inches long.

Question 13

ABC is an equilateral triangle, and point D is the midpoint of side BC. A is also a point on the circle with radius $r = 3$. What is the area of the triangle?

Statement #1: The line that passes through A and D also passes through the center of the circle.

Statement #2: Including point A, the triangle intersects the circle at exactly four points.

A. Statement 1 alone is sufficient but statement 2 alone is not sufficient to answer the question asked.

B. Statement 2 alone is sufficient but statement 1 alone is not sufficient to answer the question asked.

C. Both statements 1 and 2 together are sufficient to answer the question but neither statement is sufficient alone.

D. Each statement alone is sufficient to answer the question.

E. Statements 1 and 2 are not sufficient to answer the question asked and additional data is needed to answer the statements.

Question 14

Is $|x - 6| > 2$?

Statement #1: $|x - 4| > 3$

Statement #2: $|x - 8| > 1$

A. Statement 1 alone is sufficient but statement 2 alone is not sufficient to answer the question asked.

B. Statement 2 alone is sufficient but statement 1 alone is not sufficient to answer the question asked.

C. Both statements 1 and 2 together are sufficient to answer the question but neither statement is sufficient alone.

D. Each statement alone is sufficient to answer the question.

E. Statements 1 and 2 are not sufficient to answer the question asked and additional data is needed to answer the statements.

Question 15

In a certain company, at least 200 people own manual transmission vehicles. If 12 percent of the people who own manual transmission vehicles also own automatic transmission vehicles, do more people own automatic transmission vehicles than own manual transmission vehicles?

Statement #1: 5 percent of the people who own an automatic transmissions vehicle also own a manual transmission vehicle.

Statement #2: 15 people own both an automatic transmission vehicle and a manual transmission vehicle.

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 to answer the question asked, and additional data are needed.

Question 16

What is the value of $x/2$?

Statement #1: x is $1/5$ less than $9/10$

Statement #2: x is between $2/5$ and $4/5$

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 to answer the question asked, and additional data are needed.

