



GMAT Data Sufficiency Practice Questions

Directions: In each of the problems, a question is followed by two statements containing certain data. You are to determine whether the data provided by the statements is sufficient to answer the question.

Answer choices

- A. if statement (1) by itself is sufficient to answer the question, but statement (2) by itself is not;
 - B. if statement (2) by itself is sufficient to answer the question, but statement (1) by itself is not;
 - C. if statements (1) and (2) taken together are sufficient to answer the question, even though neither statement by itself is sufficient;
 - D. if either statement by itself is sufficient to answer the question;
 - E. if statements (1) and (2) taken together are not sufficient to answer the question, requiring more data pertaining to the problem
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Question 1

Does $x = y$?

- (1) $x^2 - y^2 = 0$
(2) $(x - y)^2 = 0$

- A.
B.
C.
D.
E.

Answer and Explanations

B

(1) **Insufficient.** It may look like the two are equal, but not necessarily. All the statement tells us is that x^2 is equal to y^2 . That doesn't mean that x equals y , because one could be negative and the other positive.

(2) **Sufficient.** This tells us that $(x - y)(x - y) = 0$. So, $(x - y) = 0$. The only way the difference between the two variables can be 0 is if they are the same.

Question 2

If R is an integer, is R evenly divisible by 3?

- (1) $2R$ is evenly divisible by 3
- (2) $3R$ is evenly divisible by 3

- A.
- B.
- C.
- D.
- E.

Answer and Explanations

A

(1) **Sufficient.** Since the quantity $2R$ is divisible by 3, one of those two factors must be divisible by 3. Since 1 isn't; R must be.

(2) **Insufficient.** We know that quantity $3R$ is evenly divisible by 3, which means that at least one of the factors must be divisible by 3. The problem, though, is that 3 is evenly divisible by 3, making it impossible for us to determine if R is.

Question 3

If he did not stop along the way, what speed did Bill average on his 3-hour trip?

- (1) He traveled a total of 120 miles.
(2) He traveled half the distance at 30 miles per hour, and half the distance at 60 miles per hour.

- A.
B.
C.
D.
E.

Answer and Explanations

D

(1) **Sufficient.** With the distance known, we could plug it into the rate formula and compute Bill's rate.

(2) **Sufficient.** If he covered the same distance at 30 mph as he did at 60 mph, he must have been travelling at 30 mph for twice as long as he was at 60 mph. Given that he travelled for 3 hours, he travelled at 30 mph for 2 hours and 60 mph for 1 hour. That comes to 120 miles total distance, and again we solve for the rate.

Question 4

Is $x + y$ positive?

- (1) $x - y$ is positive.
(2) $y - x$ is negative.

- A.
B.
C.
D.
E.

Answer and Explanations

E

(1) **Insufficient.** Pick 10 for x and 5 for y . This satisfies the statement and would allow us to answer "yes" to the question. We can't stop here though; we have to try different values to see if we can answer the question, "no." Try 5 for x and -10 for y . These values satisfy statement (1) but allow us to answer the question "no."

(2) **Insufficient.** Try the same values. Those values allow us to answer "no" to the question. But we need to consider other values. If we set y equal to -5 and x equal to 10, we can answer "yes" to the question.

You could guess between (C) and (E) or you could plug in some more numbers. As it turns out the two statements are equivalent. So they are just as insufficient together as they are separate.

Question 5

A shopper bought a tie and a belt during a sale. Which item did he buy at the greater dollar value?

- (1) He bought the tie at a 20 percent discount.
- (2) He bought the belt at a 25 percent discount

- A.
- B.
- C.
- D.
- E.

Answer and Explanations

E

(1) **Insufficient.** Only information about the tie is given. We know nothing about the belt.

(2) **Insufficient.** Only information about the belt is given. We know nothing about the tie.

All we can determine is that a greater percentage discount was obtained on the belt. Whether this translates into a greater dollar discount cannot be determined.
