GMAT Data Sufficiency Practice Test 8

1. The Embeyay Expressway and Emefay Expressway intersect at a perpendicular junction coming from Ulster City and Finster Town, respectively, while a direct road connecting the two municipalities is entirely straight. How much further would a motorist traveling the expressways between Ulster City to Finster Town have to drive in comparison to another motorist who used the direct road?

1. The distance from Ulster City to the Embeyay Expressway and Emefay Expressway junction is 12 kilometers.

2. The distance from Ulster City to Finster Town on the direct road is 15 kilometers.

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.

2. If line d in the coordinate plane has the equation $y=mx+b$, where m and b are constants, what is the slope of line d?

1. Line d intersects the line with equation $y=6x+2$ at the point (1, 8).

2. Line d is parallel to the line with equation $y=(2–m)x+b–4$.

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.

3. If m and n are non-zero integers, is $mn > nn$?

A. Statement 1: $|m| = n$
B. Statement 2: $m < n$

4. a, b, and c are sides of a right triangle. What is the area of the triangle?

A. Statement 1: $a = 4$.
B. Statement 2: $a + b + c = 4$.

5. What is the range of 5 distinct single-digit positive integers if their average is 5?

A. Statement 1: Their median is 6.
B. Statement 2: The average of the 3 largest among the 5 numbers is 7.

6. If a and b are positive integers, is $(a + b)$ prime?

A. Statement 1: $13a = 43b$
B. Statement 2: $8a = 15b$

7. What is the value of $(m + n)$ if m and n are positive integers?

A. Statement 1: $m2 – n2 = 105$
B. Statement 2: Neither m nor n is divisible by 8.

8. If a, b, and c are non-zero numbers, how many of these three numbers are positive numbers?

A. Statement 1: $a + b + c > 0$
B. Statement 2: The number of negative numbers is more than the number of positive numbers among these three numbers.