

INEQUALITIES AND MODULUS QUESTIONS

1. Is $A^2 > B^2$?

(1) $A^3 > B^3$

(2) $A > 0$

- 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.

2. Is $x > 0$?

(1) $|x + 3| = 2x - 1$

(2) $|x + 2| = 4x - 10$

- 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.

3. If $a \neq b$, Is $\frac{(b+a)}{(b-a)} > 0$?

(1) $a < 0$

(2) $b > 0$

- 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.

4. If “x” is a positive integer and $|x - 3.5| < |x - 7.5|$, then how many possible values of “x” are there?

- A. 3
- B. 4
- C. 5
- D. 6
- E. 7

5. If $-\frac{1}{2} \leq x \leq -\frac{1}{10}$ and $-\frac{1}{3} \leq y \leq -\frac{1}{16}$, then what is the maximum possible value of $x^2 * y$?

- A. $\frac{1}{6}$
- B. $-\frac{1}{1600}$
- C. $-\frac{1}{300}$
- D. $-\frac{1}{64}$
- E. $-\frac{1}{12}$