Geo SAT/PSAT practice   Thur, March 19, 2020

18

$$y < -x + a$$
$$y > x + b$$

In the xy-plane, if $(0, 0)$ is a solution to the system of inequalities above, which of the following relationships between a and b must be true?

A) $a > b$

B) $b > a$

C) $|a| > |b|$

D) $a = -b$

SAT / PSAT Practice — Thur, March, 19, 202

Answers

18

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B) $b > a$
C) $|a| > |b|$
D) $a = -b$

This word is very important

substitute $(0,0)$ into both inequalities

$y < -x + a$	$y > x + b$
$0 < -(0) + a$	$0 > 0 + b$
$0 < a$	$0 > b$

B is definitely FALSE
C & D just **might** be true

↑ *a is POSITIVE*

↑ *b is negative*

THE ANSWER IS CHOICE (A). ALL POS #'s ARE GREATER THAN ALL NEG #'s