ALG 2   SAT/PSAT practice   Thur, March 19, 2020

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

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) $a = -b$

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Answers

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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