1

a, b, c, d are positive integers such that exactly one of the following inequalities is false. Which inequality is false?

(A) a<b

(B) c<d

(C) a+c<b+c

(D) a+c<b+d

(E) a<b+c+d

2

Which of the following inequalities has a solution set that, when graphed on a number line, is a single, finite line segment?

A. x>=4
B. x^2>=4
C. x^3>=64
D. |x|>=4
E. |x|<=4

3

can you explain why are you flipping sign?

n> - 1/10.

why 1/n<-10 ?

if n=4 for example 4>-1/10 and 1/4>-10. why to flip sign?

4

Which of the following describes all values of x for which 1-x^2 ≥ 0 ?

A. x ≥ 1
B. x ≤ -1
C. 0 ≤ x ≤ 1
D. x ≤ -1 or x ≥ 1
E. -1 ≤ x ≤ 1

5

If $x<y<z$ but $x^2>y^2>z^2>0$, which of the following must be positive?

A. $x^3 y^4 z^5$

B. $x^3 y^5 z^4$

C. $x^4 y^3 z^5$

D. $x^4 y^5 z^3$

E. $x^5 y^4 z^3$