Algebra 2, Module 7, Lesson 4 – Solving Rational Inequalities Using Tables and Graphs

3. What is the solution to the inequality $\frac{x^2 + 10}{x^2 + 16} < 0$?

A.
$$x \ge \frac{5}{8}$$

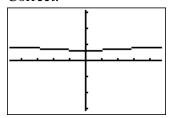
- B. -4 < x < 4
- C. All real numbers
- D. No solution

Incorrect. $\frac{5}{8}$ is the *y*-intercept, but it has nothing to do with the solution to the inequality.

Incorrect. You changed the denominator to $x^2 - 16$.

Incorrect. This inequality is never less than zero.

Correct.



The graph of the rational expression on the left shows that it is always greater. Therefore, there are no solutions to this inequality.