

MATH 150

Today

1. WeBWorK
2. Chapter 0 (0.3)

Goals:

1. Algebra Review
 - (a) Inequalities (Understand how to solve inequalities with products, quotients, and absolute values)

Where is today's material used?

1. Inequalities appear as constraints in many disciplines (math, physics, economics....)

Chapter 0: Getting on the Same Page

1. Inequalities
 - (a) Algebraic rules: multiplication by a negative reverses the sense of the inequality, as does taking reciprocals
 - (b) Sign of a product/quotient: find zeros of numerator and denominator and test sample points in the intervals they determine
 - (c) Solving inequalities: like solving equations, but watch out for signs!
 - (d) Distances on the number line and absolute values: $|x - c| < \delta \iff x > c - \delta \text{ and } x < c + \delta \iff x \in (c - \delta, c + \delta)$
2. Examples. p. 34: 22, 26, 33, 29, 23, 44, 48, 43, 52

Next Time

1. Watch 0.4 [34 min]