MATH 150

Today

1. WeBWorK
2. 7.2 Riemann Sums
3. Homefun 19

Goals:

1. Area approximation (Understand the subdivide-and-conquer approach to area problems)
2. Riemann sums (Understand the definition and representations of Riemann sums in Sigma notation)
3. Special Riemann sums (Understand the left, right, midpoint, and upper and lower sums)

Where is today's material used?

1. Physics (distance traveled, mass of an object, volume of an object, total charge, ...)
2. Economics (interest, marginal revenue/cost/profit to change in revenue/cost/profit, the multiplier effect)
3. Chemistry (physical chemistry)

Riemann Sums

1. Subdivision as a means of approximation
2. Approximating the area under a curve by using rectangles
3. Riemann sums (including Sigma notation)

4. Special Riemann sums
    (a) left and right sums
    (b) midpoint sums
    (c) upper and lower sums
5. Examples. p. 476: 27, 28, 29, 30, 41, 42, 45

Next Time

1. 7.3: Definite integrals [24 min]