

Calculus 21B

Lecture 5.6b

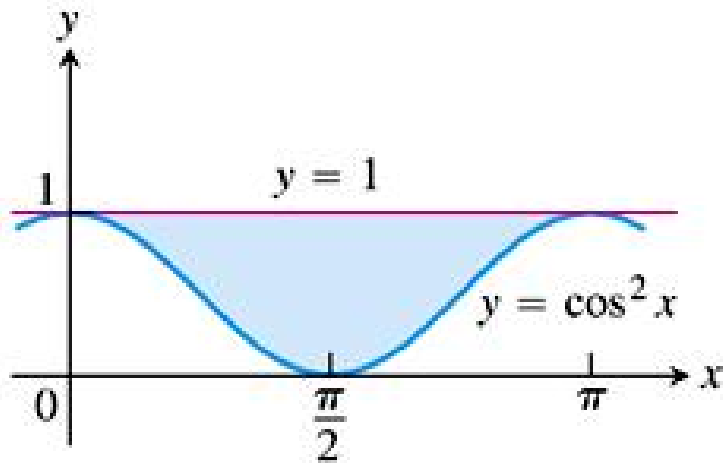
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April 17, 2009

Schedule to Midterm #1

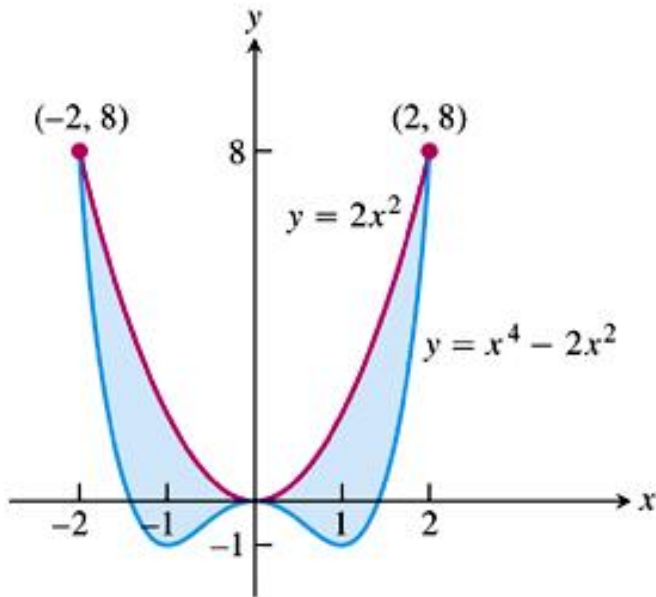
Fri, Apr 17	5.6	Areas between curves (Last topic relevant for Midterm #1) New homework (up to section 5.6) assigned
Mon, Apr 20	6.1	Volume
Wed, Apr 22	6.2	Volume
Fri, Apr 24	6.3	Length of curves Homework (up to section 5.6) due Practice midterm out (not graded)
Mon, Apr 27	6.4	Moments
Wed, Apr 29	6.5	Areas of surfaces
Fri, May 1		Midterm #1, in class

51.



Areas between curves, II

53.



NOT TO SCALE

Areas between curves, III

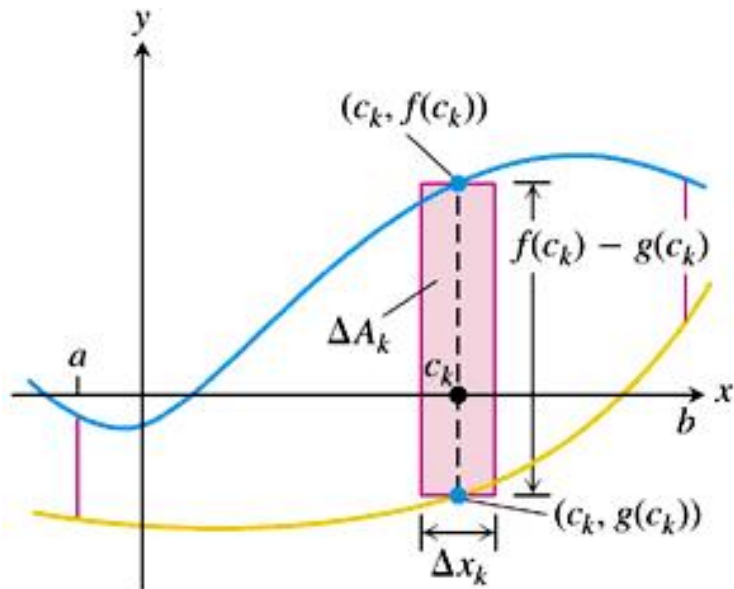
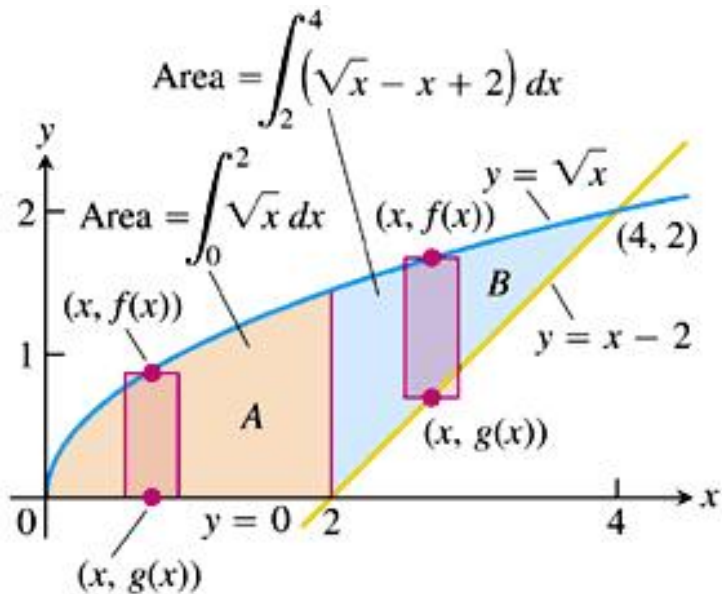


FIGURE 5.29 The area ΔA_k of the k th

Areas between curves, IV



Areas between curves, V

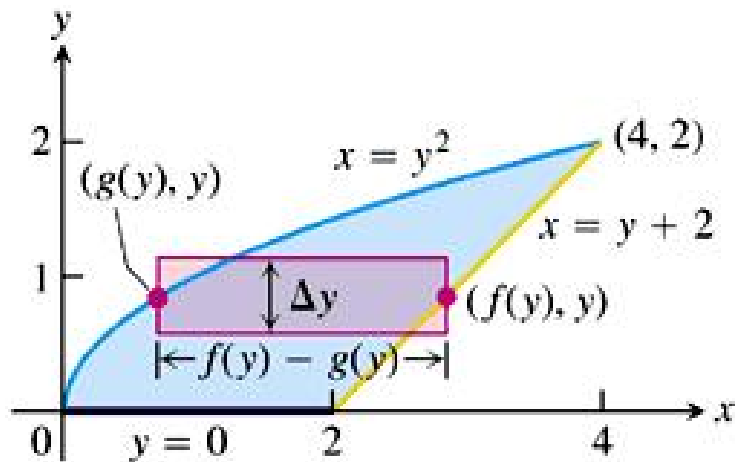


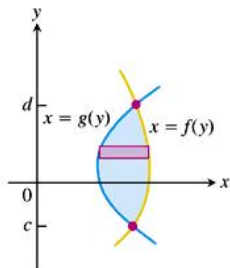
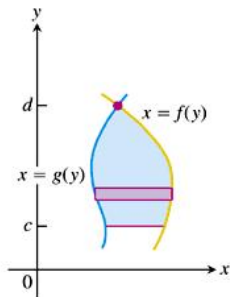
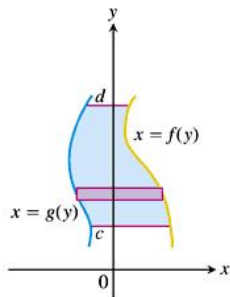
FIGURE 5.32 It takes two integrations to find the area of this

Areas between curves, VI

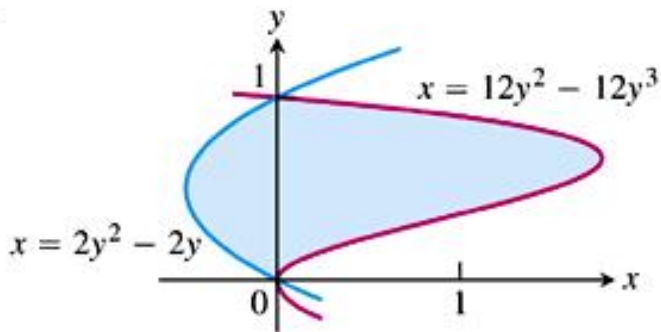
Integration with Respect to y

If a region's bounding curves are described by functions of y , the approximating rectangles are horizontal instead of vertical and the basic formula has y in place of x .

For regions like these



55.



Areas between curves, VIII

