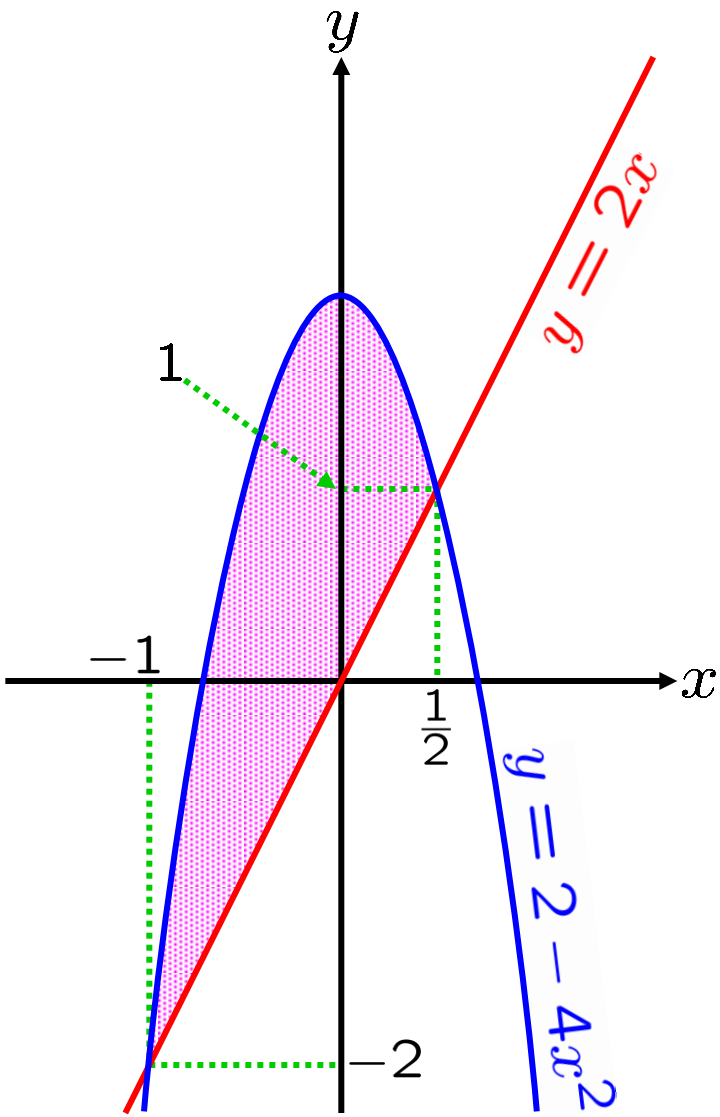
CALCULUS
Area between curves:
Problems
OLD

OLD

0690-1. Compute the shaded area shown in the picture below.



0690-2. Let R be the region enclosed inside
OLD

$$y = e^x, \quad y = x + 2, \quad x = -1 \text{ and } x = 1.$$

a. Sketch the region R.

b. Compute the area of the region R.

0690-3. Let R be the region enclosed inside
OLD

$$y = 2\sin(\pi x/2), \quad y = 2x \quad \text{and} \quad x \geq 0.$$

a. Sketch the region R.

b. Compute the area of the region R.

0690-4. Let R be the region enclosed inside
OLD

$$y = x^2 \quad \text{and} \quad y = 3x - 2.$$

a. Sketch the region R.

b. Compute the area of the region R.

0690-5. Let $f(x) = e^{-x^2/20}$ and let $g(x) = -x$.

OLD

Estimate the area of the region bounded by

$$y = f(x),\ y = g(x),\ x = 2 \text{ and } x = 8$$

by computing $M_3 S_2^8(f - g)$.