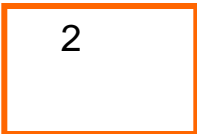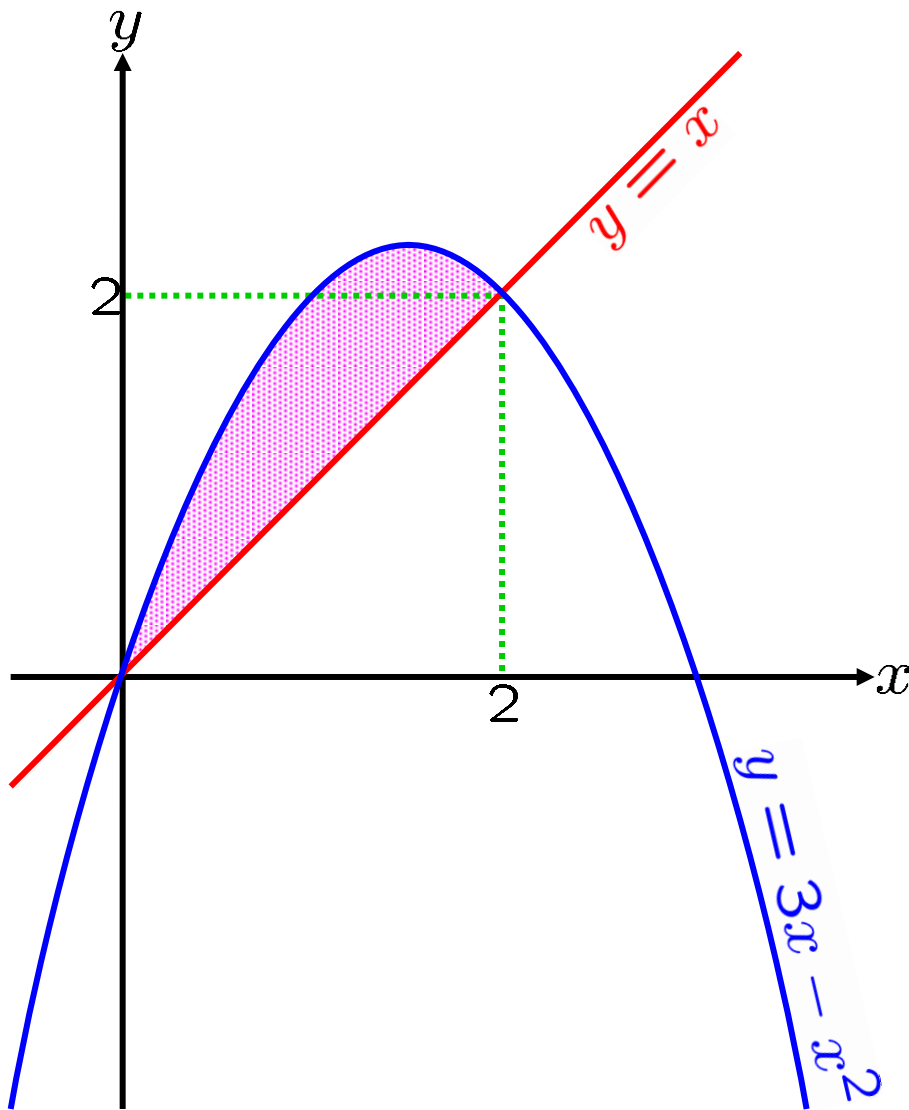# CALCULUS
Area between curves:
Problems
OLD2

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

0690-2. Let R be the region enclosed inside

$$y = e^{2x}, \quad y = x + 4, \quad x = -0.5 \text{ and } x = 0.75.$$

    a. Sketch the region R.

    b. Compute the area of the region R.

0690-3. Let R be the region enclosed inside

$$y = 2\tan(\pi x/4), \quad y = 2x \quad \text{and} \quad 0 \le x \le 1.$$

    a. Sketch the region R.

    b. Compute the area of the region R.

0690-4. Let R be the region enclosed inside

$$y = 4x^2 \quad \text{and} \quad y = 10x - 6.$$

    a. Sketch the region R.

    b. Compute the area of the region R.

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Let $f(x) = e^{-x^2/35}$ and let $g(x) = -x$. Estimate the area of the region bounded by

$$y = f(x), \; y = g(x), \; x = 4 \text{ and } x = 7$$

by computing $R_3 S_4^7(f - g)$.

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