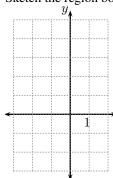
## Calculus I Homework Area Between Curves Lecture 24

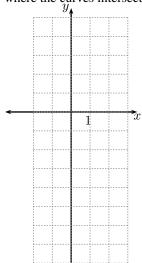
- 1. (a) Find the area of the region bounded by the curves  $y = 2x^2$  and  $y = 4 + x^2$ .
  - (b) Find the area of the region bounded by the curves  $x = 4 y^2$  and y = 2 x.
  - (c) Find the area of the region bounded by the curves  $y = x^2$  and  $y = 2x^2 + x 2$ .
  - (d) Sketch the region bounded by the curves  $y = x^2$  and  $y = 2x^2 + x 2$ .



• Find the area of the region.

(e)

• Sketch the region bounded by the curves  $y = -x^2 + 2x - 1$  and  $y = -2x^2 + 3x + 1$ . Make sure to indicate the points where the curves intersect.



• Find the area of the region.