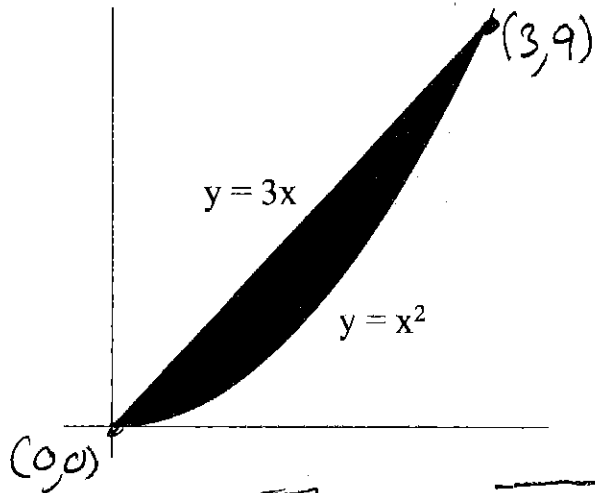


15-2 Practice Describing Regions

For each problem give inequalities that describe the region. See if you can do them both ways (x then y, and y then x).



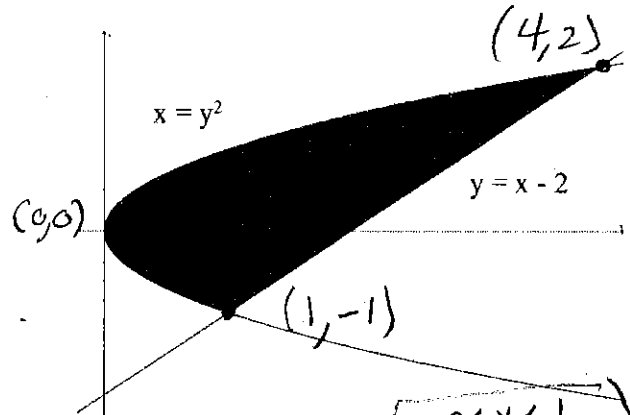
$$0 \leq x \leq 3$$

$$x^2 \leq y \leq 3x$$

or

$$0 \leq y \leq 9$$

$$\frac{1}{3}y \leq x \leq \sqrt{y}$$



$$-1 \leq y \leq 2$$

$$y^2 \leq x \leq y+2$$

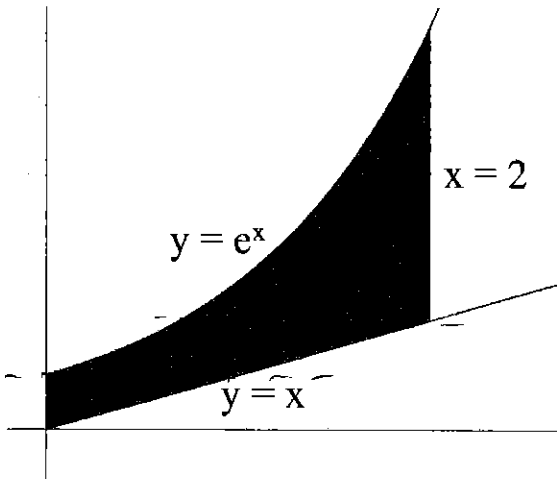
or

$$0 \leq x \leq 1$$

$$-\sqrt{x} \leq y \leq \sqrt{x}$$

$$1 \leq x \leq 4$$

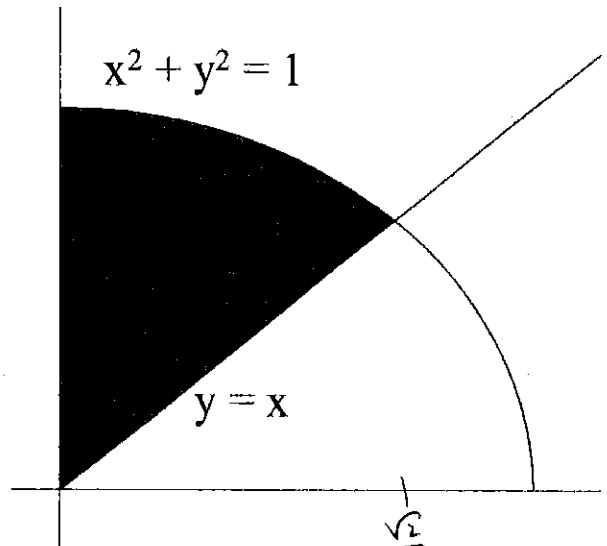
$$x-2 \leq y \leq \sqrt{x}$$



$$0 \leq x \leq 2$$

$$x \leq y \leq e^x$$

VERY MESSY TO DO
OTHER WAY



$$0 \leq x \leq \frac{\sqrt{2}}{2}$$

$$x \leq y \leq \sqrt{1-x^2}$$

or

$$0 \leq y \leq \frac{\sqrt{2}}{2}$$

$$\frac{\sqrt{2}}{2} \leq y \leq 1$$

$$0 \leq x \leq y + 0 \leq x \leq \sqrt{1-y^2}$$