

Worksheet

Volumes of solids—Disk and washer method

AP Calculus

Name \_\_\_\_\_

← using calculator

Find the volume of the solid formed by the equations:

1.)  $y = x^2$ ,  $y = 0$ ,  $x = 2$ , is rotated about:

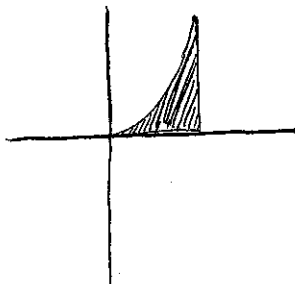
- a.) the x-axis
- b.) the y-axis
- c.) the line  $y = 4$
- d.) the line  $x = 2$

a.

b.

c.

d.



2.)  $y = 1 + \sqrt{x}$ ,  $y = 1$ ,  $x = 4$  is rotated about:

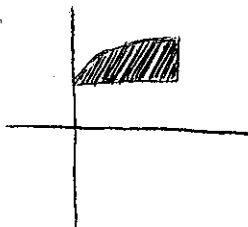
- a.) the x-axis
- b.) the y-axis
- c.) the line  $y = 3$
- d.) the line  $x = 6$

a.

b.

c.

d.



3.)  $y = x^2$  and  $y = \sqrt[3]{x}$  is rotated about:

- a.) the x-axis
- b.) the y-axis
- c.) the line  $y = 1$

a.

b.

c.

d.

