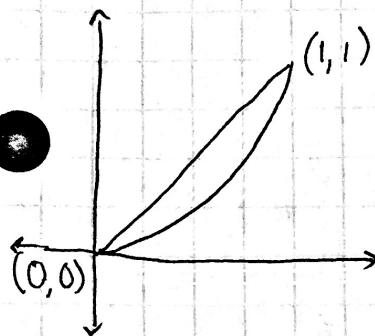


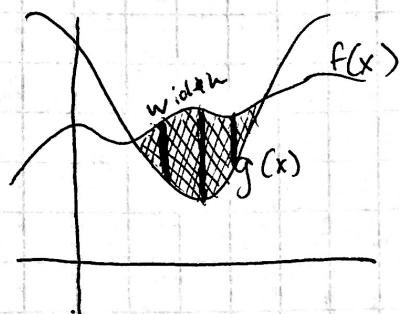
~ Solids ~



← rotations around x + y axis



VOLUME of KNOWN CROSS-SECTIONS



width = $\boxed{\text{upper} - \text{lower}} \\ f(x) - g(x)$

$\square_w = w^2$

semicircle
 $w = \text{diameter}$

$\frac{w}{2} = \text{radius}$
 $\text{area} = \frac{\pi r^2}{2} = \frac{\pi (w^2/4)}{2} = \frac{\pi w^2}{8}$

$\triangle_w$
 $\text{area} = \frac{\sqrt{3}}{4} s^2$
 $= \frac{\sqrt{3}}{4} w^2$

$\triangle_w$
 $\text{area} = \frac{1}{2} w^2$

$\triangle_w$
 $\text{area} = \frac{1}{4} w^2$

Prism-
rectangles h/w

SQUARES:

$$\int w^2 = \int (f(x) - g(x))^2$$

SEMI CIRCLES:

$$\frac{\pi}{8} \int w$$

EQUILATERAL TRIANGLES:

$$\frac{\sqrt{3}}{4} \int w^2$$

ISOSCELES TRIANGLES:

$$\frac{1}{2} \int w^2 \quad (\star \text{legs})$$

$$\frac{1}{4} \int w^2 \quad (\star \text{hypotenuse})$$

Most important
(right now)

Preview from Notesale.co.uk
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