

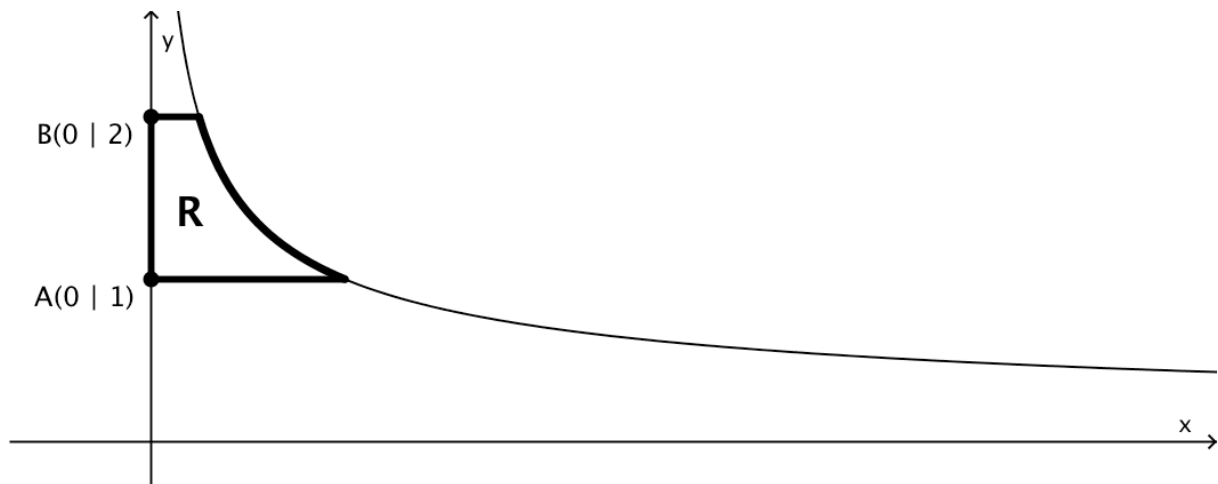
## Basic Knowledge

## Twee voorbeelden mondeling eindexamen

1.  $\cos 30^\circ = ?$
2. Circumference of a Circle ?
3. First derivative of  $f(x) = a^x$
4. Convert the angle  $60^\circ$  into radians
5. Sketch  $f(x) = \sin x$

## Test Question

The diagram shows part of the graph of  $y = \sqrt{\frac{1}{x}}$ .



- a) Region **R** is rotated about the  $y$ -axis. Find the volume of the solid of revolution.
- b) Region **R** is rotated about the  $x$ -axis. Find the volume of the solid of revolution.

## Open Question

Tell me all you know about the Dot Product.

## Basic Knowledge

1.  $\cos 45^\circ = ?$
2. Circumference of a Circle ?
3. First derivative of  $f(x) = x^n$
4. Find the argument of the complex number  $z = -1 + i$
5. Sketch  $f(x) = \tan x$

## Test Question

Prove that  $\frac{\ln x}{x} \leq \frac{1}{e}$  for all  $x > 0$ .

## Open Question

Tell me all you know about Lines in Space.