

Definite integral

Newton's definite integral:

$$\int_a^b f(x) dx = F(b) - F(a)$$

In the definition above, F is a primitive function to f , and a and b are the limits of the integral.

The result of definite integral is not a function, but a number!

Problems to solve - 1

Find:

$$\int_4^4 \int_3^e \int_{-1}^1 dx dy dz$$

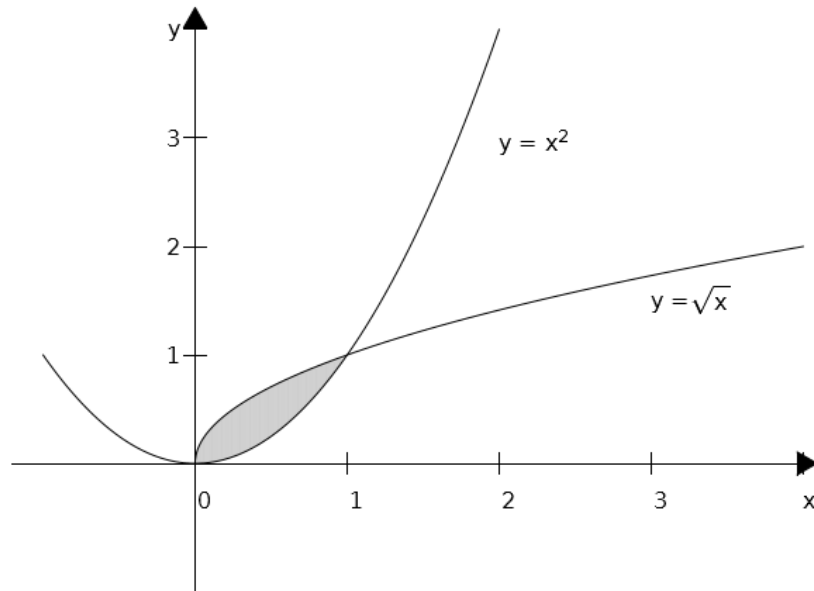
An area between two curves

Let $f(x)$ and $h(x)$ be two curves. S an area between them. And a and b their intersections.

Then S is given as follow:

$$S = \int_a^b (h(x) - f(x)) dx$$

1) Find an are between two curves: $y = x^2$ and $y = \sqrt{x}$.



2) Find an are between two curves: $y = \underline{\quad}$ and $y = \hat{\quad}$.

