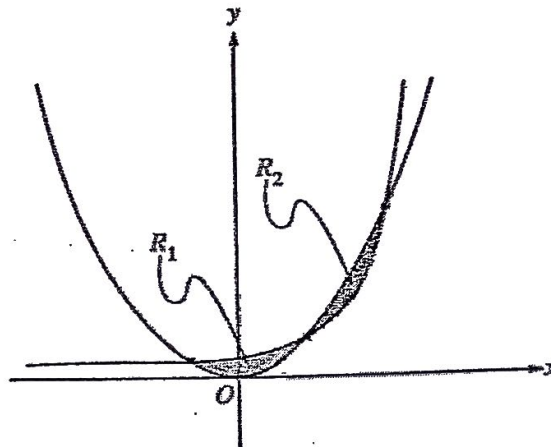




1995 AB4/BC2



Note: Figure not drawn to scale.

The shaded regions R_1 and R_2 shown above are enclosed by the graphs of $f(x) = x^2$ and $g(x) = 2^x$.

- Find the x - and y -coordinates of the three points of intersection of the graphs of f and g .
- Without using absolute value, set up an expression involving one or more integrals that gives the total area enclosed by the graphs of f and g . Do not evaluate.



1997 BC3

Let R be the region enclosed by the graphs of $y = \ln(x^2 + 1)$ and $y = \cos x$.

- Find the area of R .