AREA BY USING INTEGRALS

1. Area of the region under the curve $y = f(x)$ between the points a and b on x-axis is given by

$$Area = \int_a^b f(x)dx$$

2. Area of the region under the curve $x = g(y)$ between the points c and d on y-axis is given by

$$Area = \int_c^d g(y)dy$$