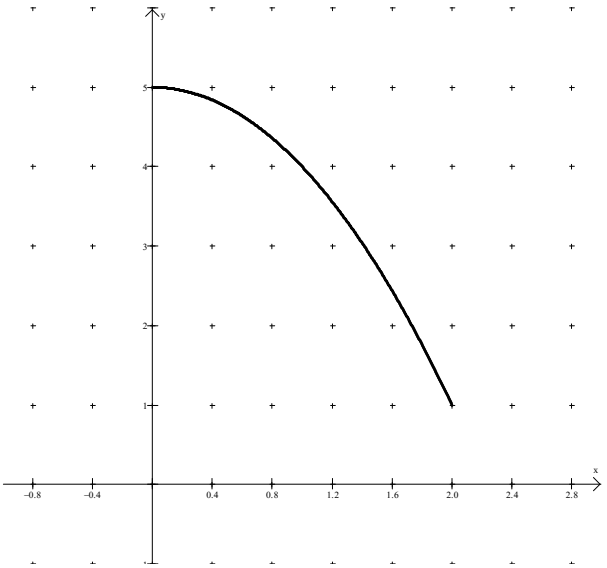
Magnet Analysis 1A Name_____
Rose

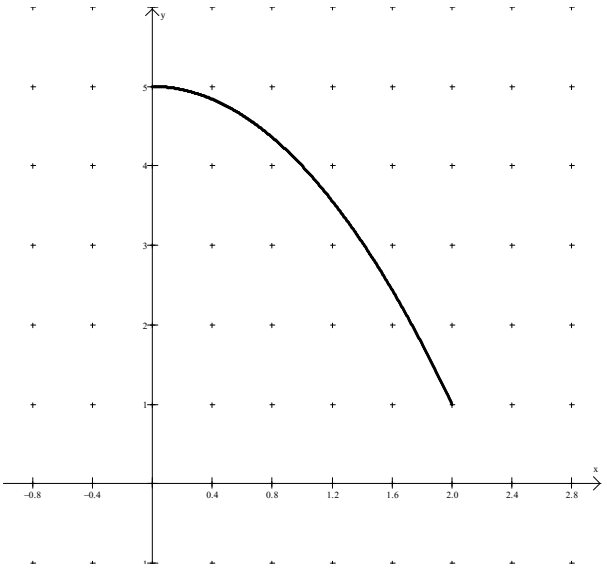
Area

Approximate the area between the *x*-axis and the curve $y = -x^2 + 5$ from $x = 0$ to $x = 2$. Divide the interval $(0, 2)$ into 5 equal-width subintervals and approximate the area using rectangles that lie alternatively below and above the curve.

Lower Estimate:

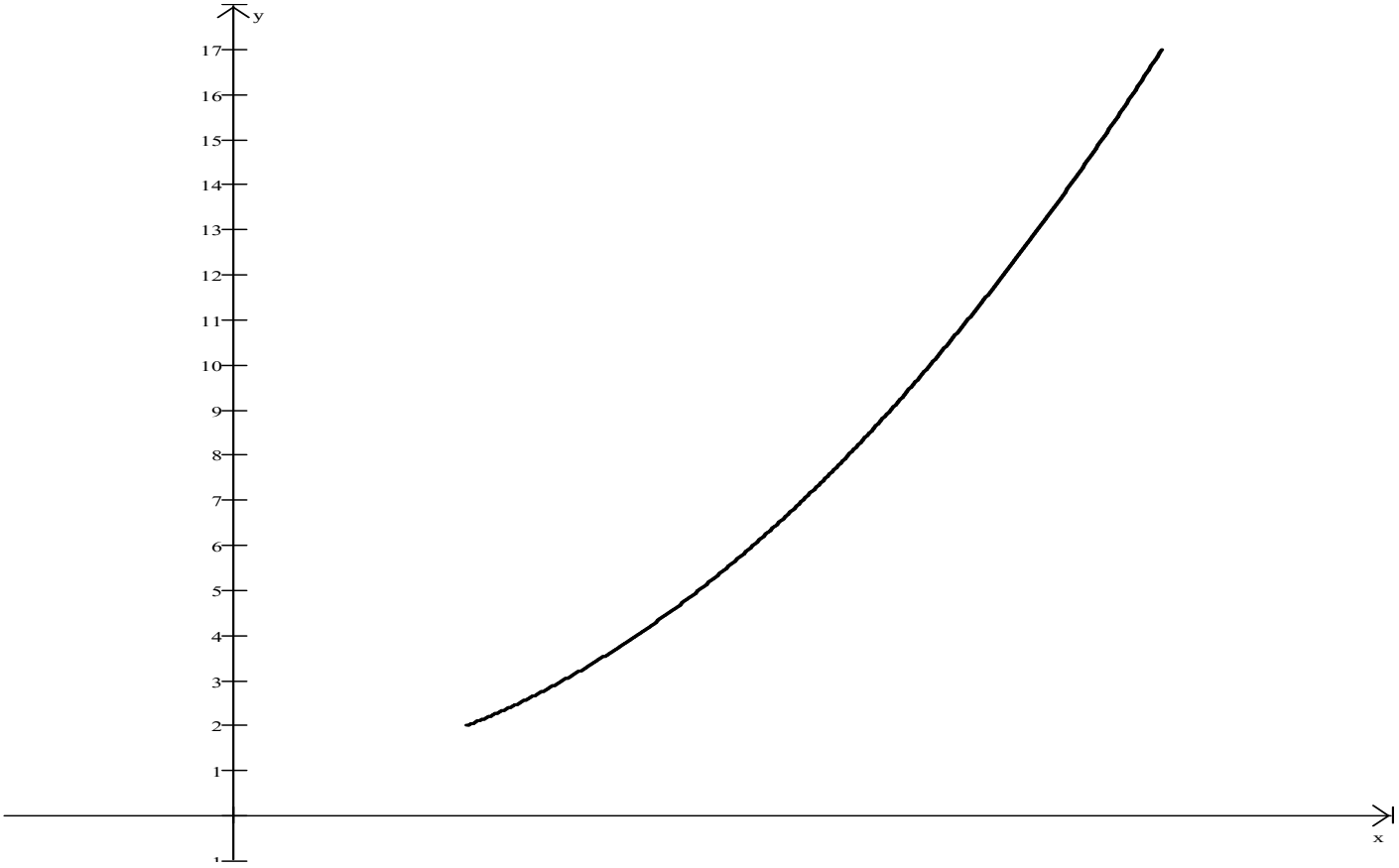


Upper Estimate:



Find the area between the *x*-axis and the curve $y = x^2 + 1$ from $x = 1$ to $x = 4$. Divide the interval into *n* equal-width subintervals and approximate the area using rectangles that lie alternatively below and above the curve.

Lower Estimate: LRAM



Find the area between the *x*-axis and the curve $y = x^2 + 1$ from $x = 1$ to $x = 4$. Divide the interval into *n* equal-width subintervals and approximate the area using rectangles that lie alternatively below and above the curve.

Upper Estimate: RRAM