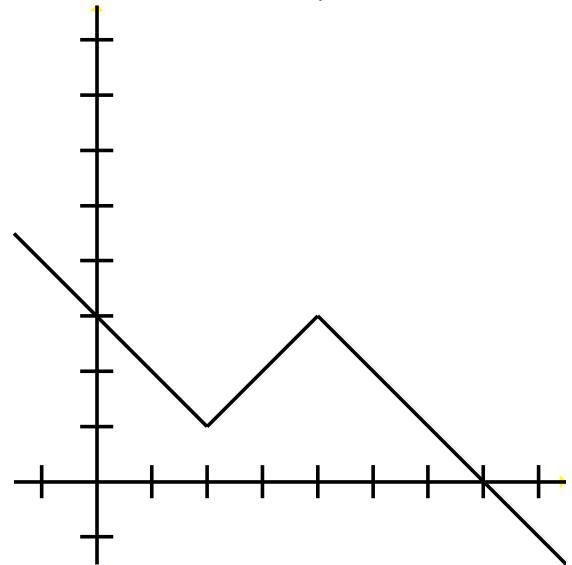


1) Use the graph of  $y = f(x)$  to the right and geometry to find the **exact** value of the expression below.

$$\int_1^4 f(x) dx$$



2) Use the graph above to find the **approximate** Riemann sum using 3 rectangles.

3) Find the integral below.

$$\int 4x^3 dx$$

,

4) Find the integral below.

$$\int x(2x^2 + 3)^5 dx$$