**find Riemann Sum for $\int_0^3 \left(-x^2+9\right)\ dx$ with $n=10$ rectangles, using left endpoints.**

$\int_a^b f(x)dx \approx \Delta x \left(f(x_0)+f(x_1)+\ f(x_2)+\ldots+f(x_{n-2})+f(x_{n-1})\right)$, where $\Delta x = \frac{b-a}{n}$.

We have that $a=0, b=3, n=10$.

Therefore, $\Delta x = \frac{3-0}{10} = \frac{3}{10}$.

Divide interval $[0,3]$ into $n=10$ subintervals of length $\Delta x = \frac{3}{10}$:

$a = \left[0, \frac{3}{10}\right], \left[\frac{3}{10}, \frac{3}{5}\right], \left[\frac{3}{5}, \frac{9}{10}\right], \left[\frac{9}{10}, \frac{6}{5}\right], \left[\frac{6}{5}, \frac{3}{2}\right], \left[\frac{3}{2}, \frac{9}{5}\right], \left[\frac{9}{5}, \frac{21}{10}\right], \left[\frac{21}{10}, \frac{12}{5}\right], \left[\frac{12}{5}, \frac{27}{10}\right], \left[\frac{27}{10}, 3\right] = b$

Now, we just evaluate function at left endpoints:

$f(x_0) = f(a) = f(0) = 9 = 9$

$f(x_1) = f\left(\frac{3}{10}\right) = \frac{891}{100} = 8.91$

$f(x_2) = f\left(\frac{3}{5}\right) = \frac{216}{25} = 8.64$

$f(x_3) = f\left(\frac{9}{10}\right) = \frac{819}{100} = 8.19$

$f(x_4) = f\left(\frac{6}{5}\right) = \frac{189}{25} = 7.56$

$f(x_5) = f\left(\frac{3}{2}\right) = \frac{27}{4} = 6.75$

$f(x_6) = f\left(\frac{9}{5}\right) = \frac{144}{25} = 5.76$

$f(x_7) = f\left(\frac{21}{10}\right) = \frac{459}{100} = 4.59$

$f(x_8) = f\left(\frac{12}{5}\right) = \frac{81}{25} = 3.24$

$f(x_9) = f\left(\frac{27}{10}\right) = \frac{171}{100} = 1.71$

Finally, just sum up above values and multiply by $\Delta x = \frac{3}{10}$:

$\frac{3}{10}(9+8.91+8.64+\ldots+3.24+1.71) = 19.305$

**Answer: 19.3050000000000.**