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**APPROXIMATE CALCULATION OF EXACT INTEGRALS IN “MS EXCEL” PROGRAM**

From course of “Principles of mathematical analysis” it is known that, it may be shown as a sum of exact integral view. In general, according to integrals tariffs the view looks as . There are some methods of finding numeric sum of approximate calculation of exact integrals.



One of them is trapezoidal method.

у

.

y1 у2 уn

ax1x2bx



 . For being exact integral sum we have to take n as large as possible.

Besides this, from formula above we can reach our mission with putting  instead of trapezoidal middle line greatness. We will use approximate calculation of integral formula for below tasks.

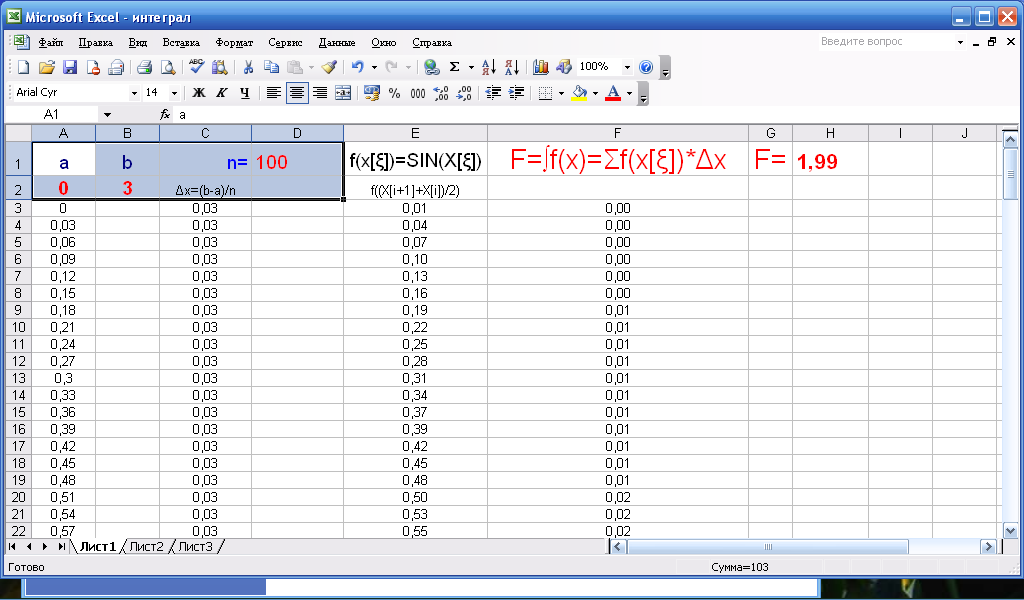




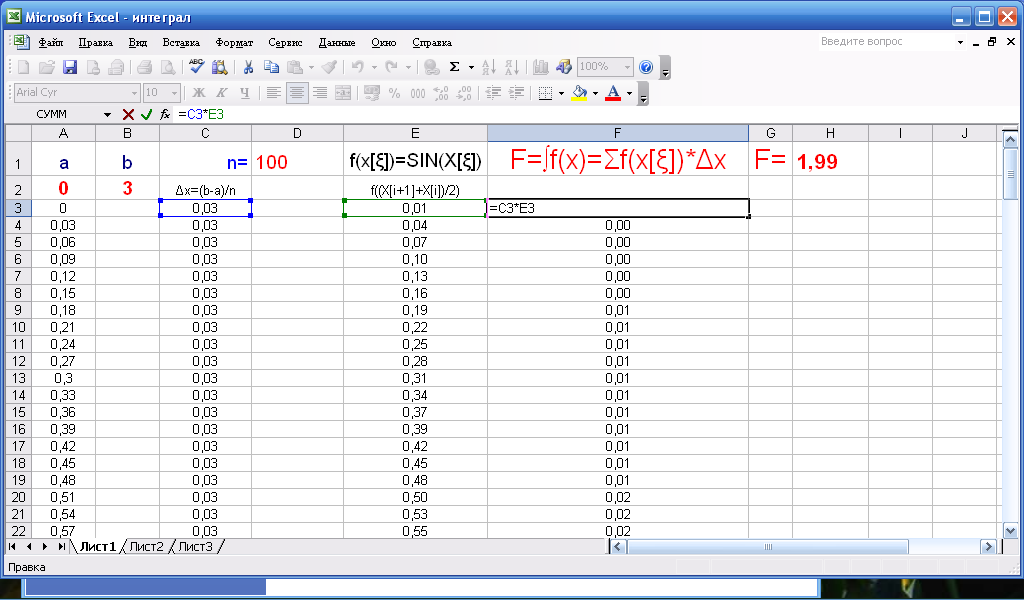
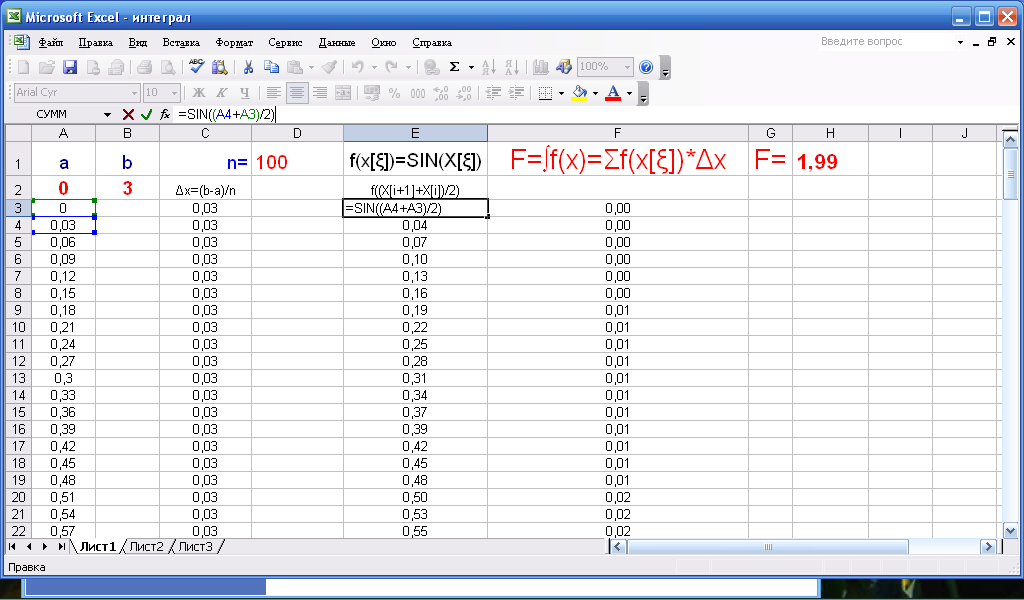
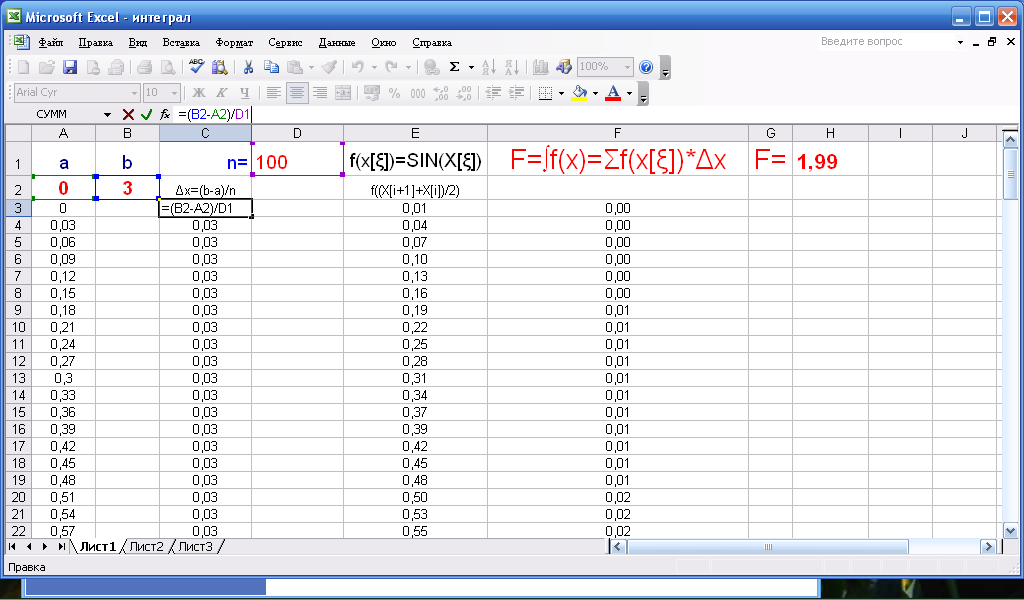
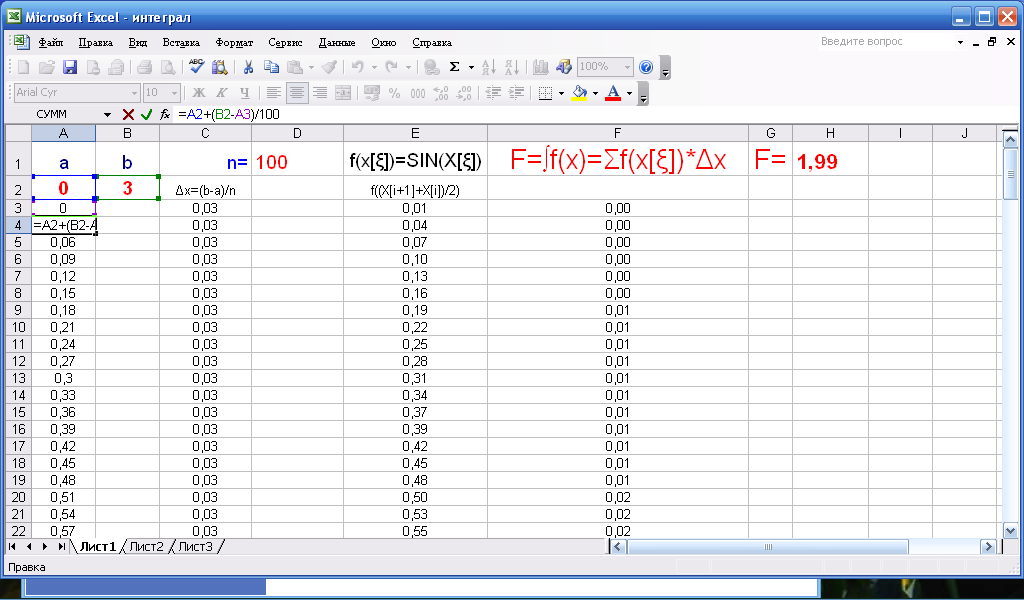
In our calculation the exactness will depend on number n. Now we will take n=100. This will be enough to start necessary calculation.

Now with the help of previous task calculation method we will realize approximate calculation of exact integrals in “MS Excel” program.

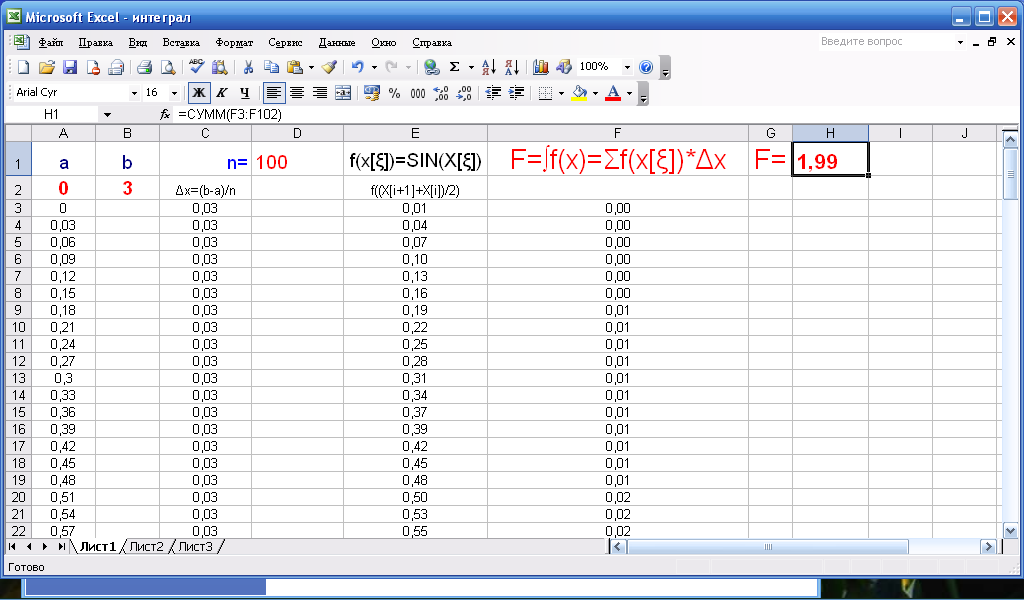
First of all we will put greatness known to us to any cell of «MS Excel» worksheet. It is shown in the picture.



Then step by step we will fill beginning cells with the help of formula.



After taking sum of beginning cells we will move copies to below lines (this works used to solve previous tasks). With this we will create sum sign below elements at F column formula. At last our job will be to put in any cell the sum of F column and finally the result in cell will be the end. In our task the sum is placed in H1.



**Literature:**

1.T.Azlarov, N.Mansurov. Matematik analiz. 1- qism. Toshkent «Uqituvchi», 1986.

2. Г.Н.Берман. Сборник задач по курсу математического анализа. Москва, «Наука», 1885.