Лабораторная работа 5

Теоретические сведения Общее описание Scilab и xcos

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Информация

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Цель работы

Постройте с помощью xcos фигуры Лиссажу со следующими параметрами: 1) A = B = 1, a = 2, b = 2, δ = 0; π/4; π/2; 3π/4; π; 2) A = B = 1, a = 2, b = 4, δ = 0; π/4; π/2; 3π/4; π; 3) A = B = 1, a = 2, b = 6, δ = 0; π/4; π/2; 3π/4; π; 4) A = B = 1, a = 2, b = 3, δ = 0; π/4; π/2; 3π/4; π.

Выполнение лабораторной работы

Упражнение

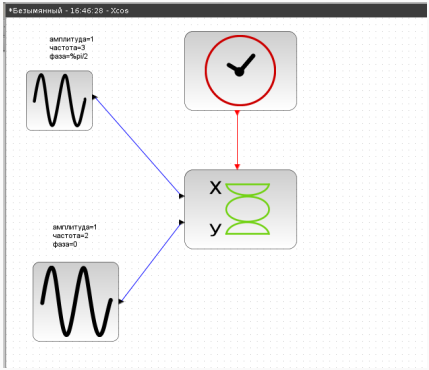

Figure 1: Пример модели в xcos

Упражнение 1

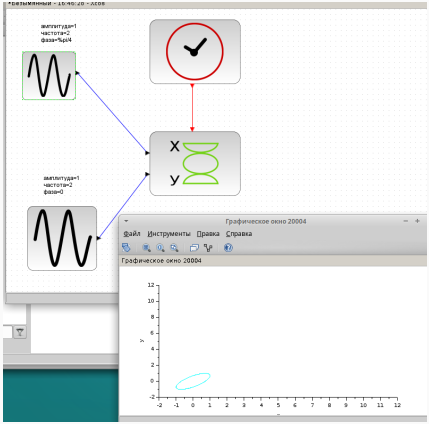

Figure 2: A = B = 1, a = 2, b = 2, δ = 0;

Упражнение

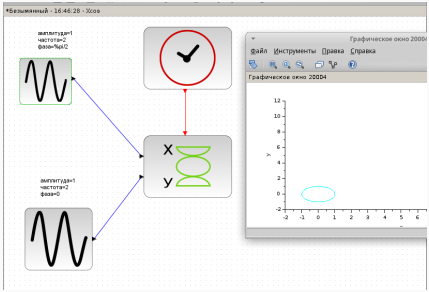

Figure 3: A = B = 1, a = 2, b = 2, δ = π/4;

Упражнение

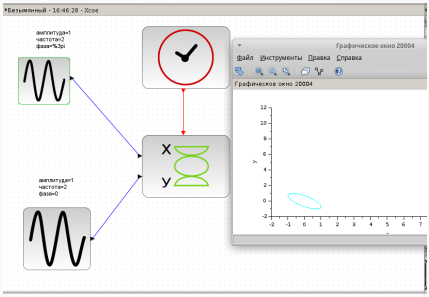

Figure 4: A = B = 1, a = 2, b = 2, δ = π/2;

Упражнение

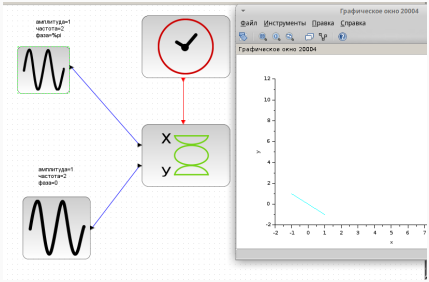

Figure 5: A = B = 1, a = 2, b = 2, δ = 3π/4;

Упражнение

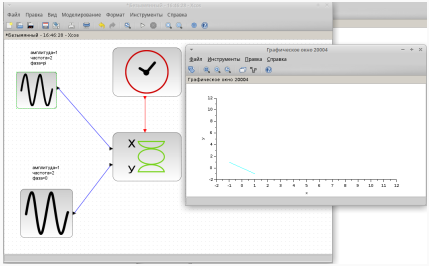

Figure 6: A = B = 1, a = 2, b = 2, δ = π;

Упражнение 2

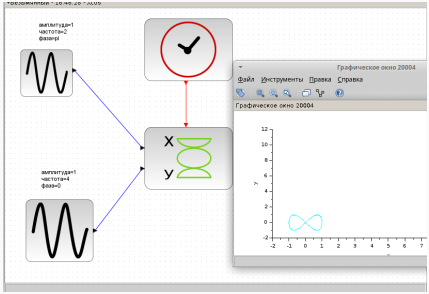

Figure 7: A = B = 1, a = 2, b = 4, δ = 0;

Упражнение

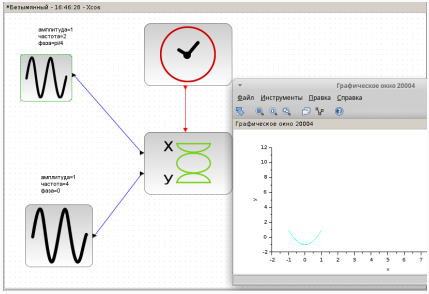

Figure 8: A = B = 1, a = 2, b = 4, $\delta = \pi/4$;

Упражнение

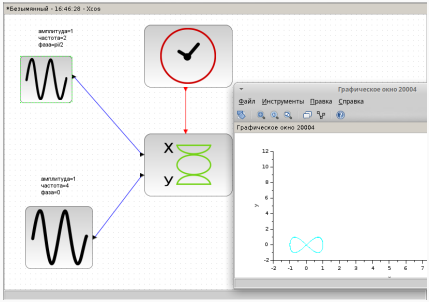

Figure 9: A = B = 1, a = 2, b = 4, δ = π/2 ;

Упражнение

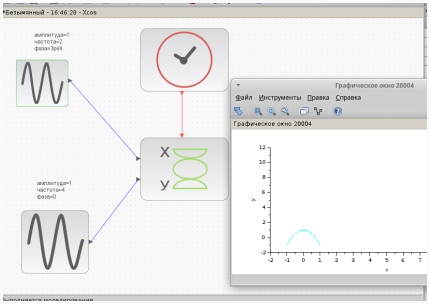

Figure 10: A = B = 1, a = 2, b = 4, δ = 3π/4 ;

Упражнение

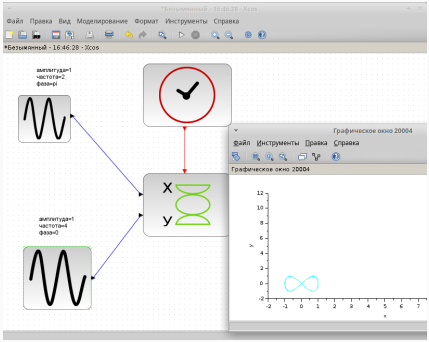

Figure 11: A = B = 1, a = 2, b = 4, δ = π ;

Упражнение 3

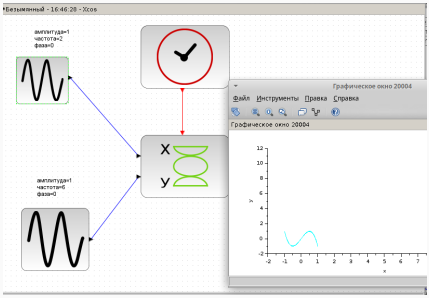

Figure 12: A = B = 1, a = 2, b = 6, δ = 0 ;

Упражнение

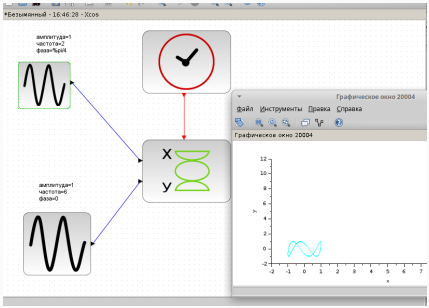

Figure 13: A = B = 1, a = 2, b = 6, δ = π/4;

Упражнение

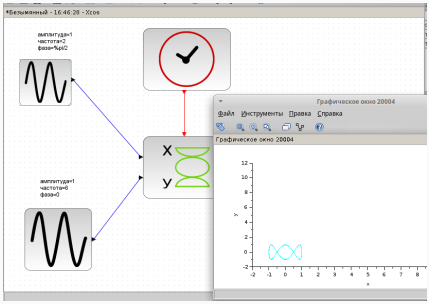

Figure 14: A = B = 1, a = 2, b = 6, δ = π/2;

Упражнение

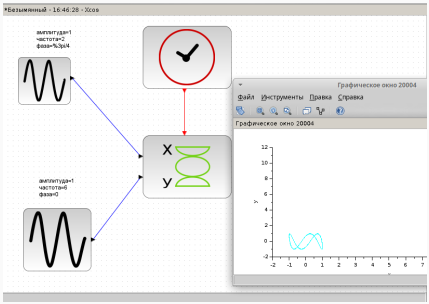

Figure 15: A = B = 1, a = 2, b = 6, δ = 3π/4;

Упражнение

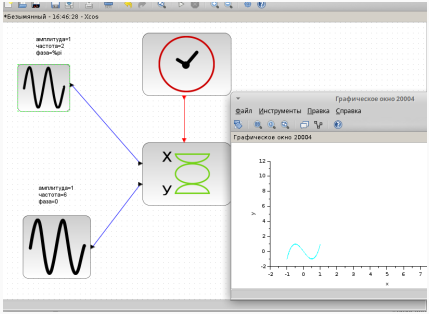

Figure 16: A = B = 1, a = 2, b = 6, δ = π;

Упражнение 4

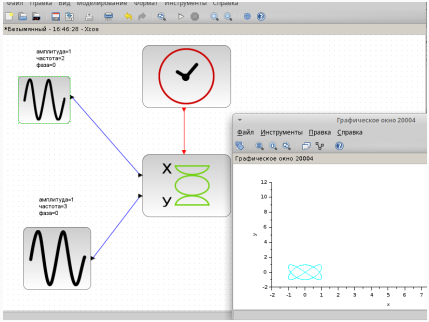

Figure 17: A = B = 1, a = 2, b = 3, δ = 0;

Упражнение

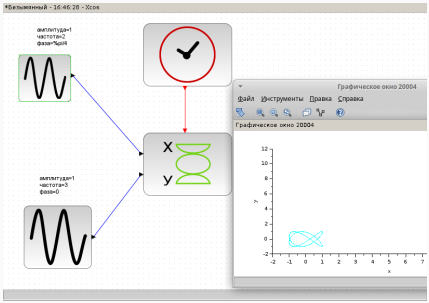

Figure 18: A = B = 1, a = 2, b = 3, δ = π/4;

Упражнение

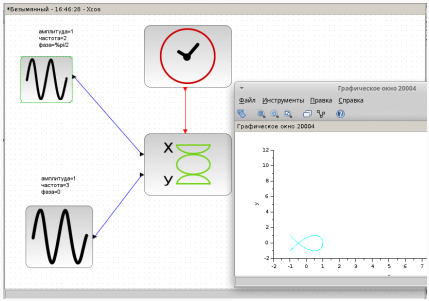

Figure 19: A = B = 1, a = 2, b = 3, δ = π/2;

Упражнение

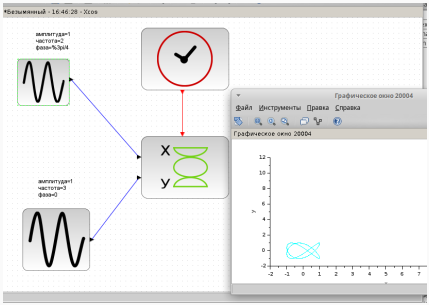

Figure 20: A = B = 1, a = 2, b = 3, δ = 3π/4;

Упражнение

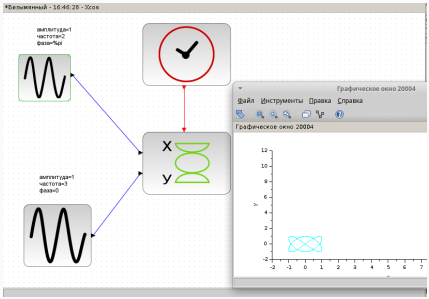

Figure 21: A = B = 1, a = 2, b = 3, δ = π;

Выводы

В процессе выполнения данной лабораторной работы получил навыки работы с программой Scilab и xcos.