Write a C++ program to display on the screen, only in the interval [-5, 5], points of a straight line of the form: \( y = a \times x + b \), where \( a \) and \( b \) are integers, using the technique described in Section 3.4 of textbook.

A sample of the display part for coefficients \( a=2, b=-4 \), should look as below, with a dashed line showing at the level 0 (only if it falls into the interval [-5, 5]):

```
   6
   4
   2
   0
  -2
 -4
-6
-8
-10
-12
-14*
```

Use of the following functions is required:

1) A function named `readCoeffs()` shall read and return coefficients \( a \) and \( b \), one at a time, entered from the keyboard by an operator, after a corresponding prompt:
   - Enter an integer non-zero coefficient:
   - The function shall not accept any coefficient equal 0, prompting the operator again.

2) The graph shall have a title at the top, written by a function named `graphTitle()`, printing the following text:
   - Drawing of a linear function \( y = a \times x + b \)
   - where values of \( a \) and \( b \) shall be the actual numbers entered from the keyboard.

3) The value of the coordinate \( y \) shall be calculated by a function named `calcY()`, with three parameters: \( a, b \) and \( x \). Value should be then written on the screen as shown in the example above.

4) A point in each line of the graph shall be drawn by a function named `drawPoint()`, with one parameter: \( x \).

5) The last line shall be printed by a function named `lastLine()`, displaying the numbers at the right points of the abscissa: -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, +5. This is not shown on the graph above.

Note. Use of global variables is not allowed.

- **Form of submission:** Two C++ source files named `assign1.cpp` (with `main()` program) and `funcs.cpp` (with functions) should be placed in your account on `sanibel` in a directory named `assign1` (created in your user directory); in addition, the `makefile` should also be placed there.
- **Deadline:** May 20 (Wednesday), by Midnight
- **Grade:** Max 10 pts  
  **Tardiness:** 2 pts per day