


```

#define ENTRY    extern
#define    LOCAL static

ENTRY double weibullDF(double x, double a, double b);
ENTRY double inv_weibullDF(double q, double a, double b);

#define __WEIBULL_H__          /* Prevents redefinition */
#endif                          /* Ends #ifndef__WEIBULL_H__ */

```

Ôàëë WeibullDF.cpp

```

#include <assert.h>
#include <math.h>

double weibullDF(double x, double b, double c)
{
    assert((b > 0) && (c > 0));
    double y = 1-exp(-pow(x/b,c));
    return y;
}

double inv_weibullDF(double q, double b, double c)
{
    assert((b > 0) && (c > 0) && (q >= 0) && (q < 1));
    return q==0 ? 0 : b*pow(-log(1-q),1/c);
}

#ifdef TEST

#include <iostream.h>

void main(void)
{
    double b, c;

    while (1) {
        cout << "\n\n\rEnter b: ";
        cin >> b;
        if (b <= 0)
            break;
        cout << "Enter c: ";
        cin >> c;

        for(double x=0; x < 8; x += 0.32)
        {
            double y=weibullDF(x, b, c);
            cout << "x=" << x << "\tw=" << y;
            double z=inv_weibullDF(y, b, c);
            cout << "\tiw=" << z << endl;
        }
    }
}

#endif

```