```c
#include <stdio.h>
#include <stdlib.h>
#include <math.h>

float **reservarmem (int n) {
    float **mat = (float **) malloc (sizeof (float *) * n);
    *mat = (float *) malloc (sizeof (float) * n * n);
    for (int i=0; i<n; ++i) {
        mat[i] = mat[i-1] + n;
    }
    return mat;
}

float **copia_mat (float **matriz, int n, int x) {
    float ** mat = reservarmem (n-1);
    int j;
    for (int i = 0; i <n; ++i) {
        if (i != n) {
            mat[j] = matriz[i];
            ++j;
        }
    }
    return mat;

double determinante (float ** matriz, int n ) {
    if (n == 2)
        return matriz[0][0] * matriz[1][1] - matriz[1][0] * matriz[0][1];
    double det=0;
    for (int i=0; i<n; ++i) {
        det += (pow(-1, i+1) * determinante (copia_mat (matriz, n, i), n-1));
    }
    return det;
}
```