

```

#include <bits/stdc++.h>
using namespace std;
#pragma GCC optimize ("Ofast")
#pragma GCC optimize ("unroll-loops")
#pragma GCC target ("sse,sse2,sse3,ssse3,sse4,popcnt,abm,mmx,avx,tune=native")

#define IOS ios_base::sync_with_stdio(false); cin.tie (nullptr)
#define PREC cout.precision (10); cout << fixed
#define bg(x) " [ " << #x << " : " << (x) << " ] "
#define x first
#define y second
using ll = long long;
using ld = long double;
using pii = pair<int,int>;

#define debug(args...) { \
    string _s = #args; replace(_s.begin(), _s.end(), ',', ' '); \
    stringstream _ss(_s); istream_iterator<string> _it(_ss); err(_it, args); \
}
void err(istream_iterator<string> it) { it->empty();
    cerr << " (Line : " << __LINE__ << ")" << '\n';
}
template<typename T, typename... Args>
void err(istream_iterator<string> it, T a, Args... args) {
    cerr << " [ " << *it << " : " << a << " ] " << ' ';
    err(++it, args...);
}
const int N = 41, M = 305, infi = (int)1e9;
int dp[M][M];
vector<pii> coins;
int n, S;

void solve() {
    for (int x = 0; x < M; ++x) for (int y = 0; y < M; ++y)
        dp[x][y] = infi;

    dp[0][0] = 0;

    for (int i = 1; i <= n; ++i)
        for (int x = 0; x < M; ++x) for (int y = 0; y < M; ++y)
        {
            if (x >= coins[i].x && y >= coins[i].y)
                dp[x][y] = min(dp[x][y], dp[x-coins[i].x][y-coins[i].y] + 1);
        }

    int mn_val = infi;
    for (int x = 0; x < M; ++x) for (int y = 0; y*y <= S*S - x*x; ++y)
    {
        if (x*x + y*y != S*S) continue;
        mn_val = min(mn_val, dp[x][y]);
    }
    if (mn_val == infi) cout << "not possible\n";
    else cout << mn_val << '\n';
}

void read() {
    cin >> n >> S;
    coins.assign(n+1, pii());
    for (int i = 1; i <= n; ++i)
        cin >> coins[i].x >> coins[i].y;
}

signed main() {
    IOS; PREC;
    int tc; cin >> tc;
    while (tc--) read(), solve();
    return EXIT_SUCCESS;
}

```