Problem Link:

<https://leetcode.com/problems/24-game/?envType=daily-question&envId=2025-08-18>

Solution:

class Solution {

public:

bool judgePoint24(vector<int>& cards) {

vector<double> v;

for(int c : cards)

v.push\_back(c);

return solve(v);

}

private:

bool solve(vector<double>& v) {

if(v.size() == 1)

return fabs(v[0] - 24) < 1e-6;

for(int i = 0; i < v.size(); ++i)

{

for(int j = 0; j < v.size(); ++j)

{

if(i == j)

continue;

vector<double> n;

for(int k = 0; k < v.size(); ++k)

if(k != i && k != j)

n.push\_back(v[k]);

for(int o = 0; o < 4; ++o)

{

if(o < 2 && j > i)

continue;

double s;

if(o == 0)

s = v[i] + v[j];

if(o == 1)

s = v[i] \* v[j];

if(o == 2)

s = v[i] - v[j];

if(o == 3)

{

if(fabs(v[j]) < 1e-6)

continue;

s = v[i] / v[j];

}

n.push\_back(s);

if(solve(n))

return true;

n.pop\_back();

}

}

}

return false;

}

};