//Computes the size of a dog house that can be purchased

//given the user's budget.

#include <iostream>

#include <cmath>

using namespace std;

int main()

{

const double COST\_PER\_SQ\_FT = 10.50;

double budget, area, length \_side;

cout << "Enter the amount budgeted for your dog house $";

cin >> budget;

area = budget / COST\_PER\_SQ\_FT;

length\_side = sqrt(area);

cout.setf(ios::fixed);

cout.setf(ios::showpoint);

cout.precision(2);

cout << "For a price of $" << budget << endl

<< "I can build you a luxurious square dog house\n"

<< "that is " << length\_side

<< " feet on each side.\n";

return 0;

}