***Chương trình tính toán:***

#include <iostream>

#include <cmath>

#include <string>

using namespace std;

double tinhDienTichHCN(double chieuDai, double chieuRong)

{

return chieuDai \* chieuRong;

}

double tinhChuViHCN(double chieuDai, double chieuRong)

{

return 2 \* (chieuDai + chieuRong);

}

double tinhDienTichHinhTamGiac(double canhA, double canhB, double canhC)

{

double p = (canhA + canhB + canhC) / 2;

return sqrt(p \* (p - canhA) \* (p - canhB) \* (p - canhC));

}

double tinhChuViHinhTamGiac(double canhA, double canhB, double canhC)

{

return canhA + canhB + canhC;

}

double tinhDienTichHinhVuong(double canh)

{

return canh \* canh;

}

double tinhChuViHinhVuong(double canh)

{

return 4 \* canh;

}

double tinhDienTichEllipse(double banTrucLon, double banTrucNho)

{

return M\_PI \* banTrucLon \* banTrucNho;

}

double tinhChuViEllipse(double banTrucLon, double banTrucNho)

{

return 2 \* M\_PI \* sqrt((banTrucLon \* banTrucLon + banTrucNho \* banTrucNho) / 2);

}

double tinhDienTichHon(double banKinhDay, double chieuCao)

{

return M\_PI \* banKinhDay \* (banKinhDay + sqrt(chieuCao \* chieuCao + banKinhDay \* banKinhDay));

}

double tinhTheTichHon(double banKinhDay, double chieuCao)

{

return (1/3.0) \* M\_PI \* banKinhDay \* banKinhDay \* chieuCao;

}

int main()

{

int luaChon;

double a, b, c;

cout<<"Chuong trinh tren duoc viet theo ngon ngu lap trinh C++.\n";

cout<<"Produced by HieuPC7A3\n";

cout<<"Phan mem nay khi chia thuong se lam tron so the nen la thuong dung thuong se khac so voi tinh binh thuong\n";

do{

cout << "Chon mot trong cac lua chon sau:\n";

cout << "1. Cong\n";

cout << "2. Tru\n";

cout << "3. Nhan\n";

cout << "4. Chia\n";

cout << "5. Tinh dien tich hinh chu nhat\n";

cout << "6. Tinh chu vi hinh chu nhat\n";

cout << "7. Tinh dien tich hinh tam giac\n";

cout << "8. Tinh chu vi hinh tam giac\n";

cout << "9. Tinh dien tich hinh vuong\n";

cout << "10. Tinh chu vi hinh vuong\n";

cout << "11. Tinh dien tich ellipse\n";

cout << "12. Tinh chu vi ellipse\n";

cout << "13. Tinh dien tich hinh non\n";

cout << "14. Tinh the tich hinh non\n";

cout << "15. Thoat chuong trinh\n";

cout << "Lua chon cua ban: ";

cin >> luaChon;

switch (luaChon)

{

case 1:

cout << "Nhap so thu nhat: ";

cin >> a;

cout << "Nhap so thu hai: ";

cin >> b;

cout << "\*\*\*Ket qua\*\*\*\*: " << a + b << endl;

break;

case 2:

cout << "Nhap so thu nhat: ";

cin >> a;

cout << "Nhap so thu hai: ";

cin >> b;

cout << "\*\*\*Ket qua\*\*\*: " << a - b << endl;

break;

case 3:

cout << "Nhap so thu nhat: ";

cin >> a;

cout << "Nhap so thu hai: ";

cin >> b;

cout << "\*\*\*Ket qua\*\*\*: " << a \* b << endl;

break;

case 4:

cout << "Nhap so bi chia: ";

cin >> a;

cout << "Nhap so chia: ";

cin >> b;

if (b == 0)

{

cout << "Khong the chia cho 0!" << endl;

}

else

{

cout << "\*\*\*Ket qua\*\*\*: " << a / b << endl;

}

break;

case 5:

cout << "Nhap chieu dai hinh chu nhat: ";

cin >> a;

cout << "Nhap chieu rong hinh chu nhat: ";

cin >> b;

cout << "\*\*\*Dien tich hinh chu nhat\*\*\*: " << tinhDienTichHCN(a, b) << endl;

break;

case 6:

cout << "Nhap chieu dai hinh chu nhat: ";

cin >> a;

cout << "Nhap chieu rong hinh chu nhat: ";

cin >> b;

cout << "\*\*\*Chu vi hinh chu nhat\*\*\*: " << tinhChuViHCN(a, b) << endl;

break;

case 7:

cout << "Nhap canh thu nhat cua tam giac: ";

cin >> a;

cout << "Nhap canh thu hai cua tam giac: ";

cin >> b;

cout << "Nhap canh thu ba cua tam giac: ";

cin >> c;

cout << "\*\*\*Dien tich hinh tam giac\*\*\*: " << tinhDienTichHinhTamGiac(a, b, c) << endl;

break;

case 8:

cout << "Nhap canh thu nhat cua tam giac: ";

cin >> a;

cout << "Nhap canh thu hai cua tam giac: ";

cin >> b;

cout << "Nhap canh thu ba cua tam giac: ";

cin >> c;

cout << "\*\*\*Chu vi hinh tam giac\*\*\*: " << tinhChuViHinhTamGiac(a, b, c) << endl;

break;

case 9:

cout << "Nhap canh cua hinh vuong: ";

cin >> a;

cout << "Dien tich hinh vuong: " << tinhDienTichHinhVuong(a) << endl;

break;

case 10:

cout << "Nhap canh cua hinh vuong: ";

cin >> a;

cout << "\*\*\*Chu vi hinh vuong\*\*\*: " << tinhChuViHinhVuong(a) << endl;

break;

case 11:

cout << "Nhap ban truc lon cua ellipse: ";

cin >> a;

cout << "Nhap ban truc nho cua ellipse: ";

cin >> b;

cout << "\*\*\*Dien tich ellipse\*\*\*: " << tinhDienTichEllipse(a, b) << endl;

break;

case 12:

cout << "Nhap ban truc lon cua ellipse: ";

cin >> a;

cout << "Nhap ban truc nho cua ellipse: ";

cin >> b;

cout << "\*\*\*Chu vi ellipse\*\*\*: " << tinhChuViEllipse(a, b) << endl;

break;

case 13:

cout << "Nhap ban kinh day cua hinh non: ";

cin >> a;

cout << "Nhap chieu cao cua hinh non: ";

cin >> b;

cout << "\*\*\*Dien tich hinh non\*\*\*: " << tinhDienTichHon(a, b) << endl;

break;

case 14:

cout << "Nhap ban kinh day cua hinh non: ";

cin >> a;

cout << "Nhap chieu cao cua hinh non: ";

cin >> b;

cout << "\*\*\*The tich hinh non\*\*\*: " << tinhTheTichHon(a, b) << endl;

break;

case 15:

return 0;

default:

cout << "Lua chon khong hop le!" << endl;

break;

}

}while (luaChon != 0);

return 0;

}

Kết quả khi Chương trình chạy:  
A screenshot of a computer

Description automatically generatedA screen shot of a computer

Description automatically generated

A screen shot of a computer

Description automatically generated

\*Chương trình được thực hiện trên OnlineGDB <https://www.onlinegdb.com/>