#7 Half Number

    int number;

    cout << "Please enter the first number  ? \n";

    cin >> number;

    cout << "Half of " << number << " is " << number / 2;

#9 sum of 3 numbers

    short a, b, c;

    cout << "Please enter the first number  A ? \n";

    cin >> a;

    cout << "Please enter the first number   B? \n";

    cin >> b;

    cout << "Please enter the first number  C? \n";

    cin >> c;

    int sum = a + b + c;

    cout << "Output is : " << sum;

#10 avg of 3 marks

    short a, b, c;

    cout << "Please enter the first mark1 ? \n";

    cin >> a;

    cout << "Please enter the first mark2? \n";

    cin >> b;

    cout << "Please enter the first mark3? \n";

    cin >> c;

    int avg = (a + b + c) / 3;

    cout << "Output is : " << avg;

}

#14 swap numbers

    short a, b;

    cout << "Please enter the first number  A ? \n";

    cin >> a;

    cout << "Please enter the first number   B? \n";

    cin >> b;

    cout << "Output : \n";

    cout << a << "\n"

         << b << "\n \n";

    short temp = a;

    a = b;

    b = temp;

    cout << a << "\n"

         << b << "\n";

#15 Rectangle area

   short width, length;

    cout << "Please enter  width ? \n";

    cin >> width;

    cout << "Please enter  length? \n";

    cin >> length;

    short rectangleArea = width \* length;

    cout << "Rectangle area is :" << rectangleArea;

#17 Triangle area

 short base, height;

    cout << "Please enter  base ? \n";

    cin >> base;

    cout << "Please enter  height? \n";

    cin >> height;

    float triangleArea = 0.5f \* base \* height; // f==>float

    cout << "Triangle area is : " << triangleArea;

#19 Circle Area through diameter

    float diameter;

    cout << "Please enter  circle  diameter ? \n";

    cin >> diameter;

    float radius = diameter / 2;

    const float PI = 3.14;

    float circleArea = PI \* radius \* radius; // f==>float

    cout << "circle area is : " << circleArea;

#20 circle area inscribed in a square

    float squareSideLength;

    cout << "Please enter  square side length ? \n";

    cin >> squareSideLength;

    const float PI = 3.14;

    float circleArea = (PI \* squareSideLength \* squareSideLength) / 4;

    cout << "circle area is : " << circleArea;

#21 circle area along the circumference

float circleCircumference;

    cout << "Please enter  circle circumference ? \n";

    cin >> circleCircumference;

    const float PI = 3.14;

    float circleArea = (circleCircumference \* circleCircumference) / (4 \* PI);

    cout << "circle area is : " << circleArea;

#22 circle area inscribed in an isosceles triangle

  float triangleequalSides, trianglebase;

    cout << "Please enter triangle sides length ,1-triangleequalSides 2-  trianglebase? \n";

    cin >> triangleequalSides;

    cin >> trianglebase;

    const double PI = 3.141592653589793;

    float circleArea = (PI \* trianglebase \* trianglebase / 4) \* ((2 \* triangleequalSides - trianglebase) / (2 \* triangleequalSides + trianglebase));

    cout << fixed << setprecision(3); // 4 أرقام بعد الفاصلة

    cout << "circle area is : " << circleArea;