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| **C# Programming**  **Simple Calculations**  One of the most important features of a program is the ability to perform calculations. Programs can perform simple arithmetic or complex (above A-Level Maths) calculations.  **Operator Used**  + - Addition  - - Subtraction  \* - Multiplication  / - Division  Math.Pow - To the Power  **The Program**  static void Main(string[] args)  {  int num1;  int num2;  double result;  Console.WriteLine("Please enter a number ");  num1 = Convert.ToInt32(Console.ReadLine());  Console.WriteLine("Please enter another number ");  num2 = Convert.ToInt32(Console.ReadLine());  result = num1 + num2;  Console.WriteLine("The sum is " + result);  result = num1 \* num2;  Console.WriteLine("The product is " + result);  result = Math.Pow(num1, 2);  Console.WriteLine(num1 + " squared is " + result);  Console.ReadLine();  } |
| **Programming Tasks**  For each of these programming tasks, create and test a program. For each:   * Add comments with a description of the task, your name and the date * Copy the program to a Word document * Paste a screen shot of the console as evidence that the program worked * Check that you have your name, and date in a header * Ask your tutor to sign off the completed Task Sheet   **Task 1**  Write a program that asks for 2 numbers and then display the result of the following calculations:   * The two numbers added together * Number 1 subtracted from number 2 * The two numbers multiplied together * Number 1 divided by number 2 * Number 1 raised to the power of number 2 (Keep numb 2 less than 5)   **Task 2**  Ask the user to enter one side of a square and your program should display the area of the square.  **Task 3**  Ask the user to enter two sides of a rectangular field and your program should display the area of the field and the length of fence to go round that field.  **Task 4**  Ask the user to enter the Height and Base of a triangle and your program should display the area of the triangle.  The formula to calculate the area of a triangle is  **Task 5**  Ask the user to enter the radius, *r*, of a circle. Your program should display the area and circumference of this circle.  Pi = 3.1415    **Task 6**  A takeaway shop sells portions of chicken and chips for £4.25 each.  Write a program that asks for how many portions have been sold and then prints out the total amount of money taken.  **Task 7**  A “phone bill” is made up of £20 for being connected to a network, £10 for broadband and then 10p for each call made.  Write a program that asks for the number of calls and then calculates the phone bill. |