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For each of the below questions, write a short sentence or two to express (in your own words) your answer. Keep the answers short, but use complete, correct, English sentences.

If it helps to clarify the questions, feel free to mentally prefix all the questions with the phrase "According to the video…"

* After you’ve watched all the videos, please answer this question:  
  Of all the videos that you watched, if you could pick one video to be re-recorded by the instructor outside of class which would you choose? Why?  
  (Keep in mind the recording outside of class will omit any pauses from the instructor answering student questions, have less hemming and hawing, etc, and generally be more concise)

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| --- |
| Would you mind adding background music to loop in the videos? They're honestly hard to focus on your voice with the deafening silence inbetween your sentences, accompanied by the low humming static. |

**VIDEO: How To Use My Videos**

* When viewing the videos in your web browser, where are the video-playback controls located?

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| At the lower edge of the screen, there's the entire arsenal of controls. |

* List out at least three controls that you’ll find on the web page, and what each one does.

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| Play/Pause, Thumb, Volume, TOC |

* How can you download the .MP4 video file (so that you can watch it in a media player program on your local computer)?

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| Downloading it from navigating your homepage, to the cloud its located on, then somewhere at the top of the page you can select the "Download" button. |

* List out at least three features that the VLC Media Player has, and what each one does.

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| Play/Pause, It's on the tin, it pauses and plays the video.  Scrub, It allows the user to scrub through the video and jump to points in the video they want to manually; while looking at the time signature at the bottom of the program.  Full-Screen, it has the video on the player fill the screen on your monitor.  Volume, it controls the sound levels of your video. |

**VIDEO: What is a project?**

* How many files might a typical program be made of?

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| Unspecified in the video, maybe I missed the actual numerical amount, but "Many" is what I'm concluding. |

* What can you think of a project as?  
  What is the primary purpose of a project?

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| This is a bucket.  Store all thoe files in the same place. Nothing too unique when spread across multiple programs. |

* Give some examples of different types of files that you might store inside a project?

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| Source code files, image files, .mp4s. |

* What is a Visual Studio Solution?

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| Its a "further bucket" that contains multiple projects. So projects all stored in one place, that those project store files for the entire project. |

* Give some examples of different things that a Solution might contain.

|  |
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| The main project, the installer project, the help project, or rather any individual project. |

* THIS IS REALLY IMPORTANT:  
  When you’re working with a Project/Solution in Visual Studio, WHICH FILE SHOULD YOU OPEN?

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| While you can open the files in the projects, don't open them individually. Open the project themselves so the program can read the files. |

* What problem will you run into if you open a C# file directly?

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| It won't know how to read the file, but it will open it up regardless. Since it doesn't have the rest of the project with it. |

**VIDEO: How to create a simple console application**

* Briefly explain two separate ways to start the process of creating a new project.

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| Under file, you can click the "New Project" tab once it folds open. Or you can click on the "New Project..." on the Start Page of the Express 2013 Windows Visual Studios page that you see when you open the program. |

* If you’re working at school and you have trouble getting your program to compile and run on the H: (network) drive, where should you try saving the project?

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| If not the network drive in the H: Drive, then the C: Drive. |

* How do you tell Visual Studio to display line numbers?

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| TOOLS -> OPTIONS -> search for 'Line' -> 'All Languages' tabs -> Line Numbers |

* What is the difference between “Start **With** Debugging” and “Start With**out** Debugging”

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| With: It will start the program, it will run the program, and as soon as it finishes; it will close the program.  Without: It will run the program, and await a prompt to close the command window. |

* How does Visual Studio indicate that your file has a compile-time/syntax error?

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| "Red Squiggles" that underline your code for context. Or at the bottom, there is an Error List that lets you view and jump to lines of code that are having issues. |

**VIDEO: How to download and use a simple console application**

* What is the key thing to do after you’ve downloaded the .ZIP archive?

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| Extract the file from the archive. |

* If you don’t extract the files from the .ZIP archive and instead you open the C# file from within Visual Studio anyways (while the file is still inside the .ZIP archive) what problem will you run into?

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| --- |
| Visual Studios cannot deal with things inside of an archive. You cannot save files like that. |

* How do you get Visual Studio to display the Solution Explorer?

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| --- |
| View -> Solution Explorer  or  CTRL + ALT + L |

**VIDEO: How Basic console I/O ("Everything you need to know for this class, and nothing more”)**

* What does Console.WriteLine do?

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| It prints whatever specified text/string/variable is in the parenthesis; quotation marks. |

* How does Console.Write differ from Console.WriteLine?

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| The Console.WriteLine creates a 'new-line' prompt for the console to go into the next line when it finishes printing its text.  The Console.Write does not, and prints whatever is in the quotation marks in verbatim. |

* How does one produce a line of output in Java (and potentially in C#). Assuming that int x = 3; int y = 7; has been declared, list the code here:

|  |
| --- |
| int x = 3;  int y;  y = 7;  Console.Write("x: " + x + " y: " + y); |

* What is the better way to print out variables in C#. Assuming that int x = 3; int y = 7; has been declared, list the code here:

|  |
| --- |
| This is exclusive to C#  Console.WriteLine("x: {0} y: {1}", x, y); |

* When printing out variables, what does {0} refer to? {1}?

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| --- |
| Instead of printing whatever is in requisite between the quotations in verbatim, instead they act as in-line variables that will jump to check the collection of variables after the quotation marks. These variables are treated in array numerics and begin at 0 counting up. |

* Before getting input from the user what should the program first do?

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| Prompt the user by sending them a message through the console. |

* What is the line of C# code that will get whatever the user has typed?  
  (Make sure that your code stores that input into a variable)

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| --- |
| string szInput;  szInput = Console.ReadLine(); |

* What is the line of C# code that will convert the input from text into a integer?

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| --- |
| Int32.TryParse(szInput, out x); |

* If the user types in a non-integer value, what will the value of **out x** be?

|  |
| --- |
| When it fails, it sets x to be '0'. |

* What is the C# source code can you use to check if the user actually typed in an integer (and display a message either repeating that value, or telling the user that they didn’t type a number in)?

|  |
| --- |
| if (Int32.TryParse(szInput, out x) == true)  {  Console.WriteLine("The number you typed is: {0}", x);  }  else  {  Console.WriteLine("You did NOT type a number!");  } |

* What is the C# source code that will attempt to convert user input into a real number (into a double value)?

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| --- |
| Double.TryParse(szInput, out d) == true |

**VIDEO: Expression Evaluation (Order of operations)**

* Describe in your own words what the first thing that we do when evaluating an expression:

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| Annotate everything in the line of code for their Data Types |

* We then repeatedly do two steps.  
  What is the step 1? What is step 2?

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| --- |
| Figure out what operator goes next  Do the operator |

* When you see a number like 3.0, what is it’s data type?

|  |
| --- |
| Double |

* When you see a number like 3 (without the .0 / without anything after the decimal point), what is it’s data type?

|  |
| --- |
| Integer |

* How do we figure out which operator goes next?

|  |
| --- |
| PEMDAS -> Right to Left assosciation |

* Once we’ve identified which operator will be evaluated next,   
  what are the three steps in actually doing / evaluating an operator?

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| --- |
| Substitute values as needed  Convert between data types as needed  Evaluate ("do") the operator |

* In the precedence table that was built for you, which operator goes first?

|  |
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| Top-most operator |

* What does ‘left to right associativity’ mean?

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| If there's more than 1 pre-assignemnt statements in the listing, you go from left to right in order |

* How is the assignment operator unusual?

|  |
| --- |
| Instead of obeying left to right associativity, it goes right to left |

* In the expression that gets evaluated in the video, what “operator” goes first?

|  |
| --- |
| Parentheses |

* Within that thing that gets evaluated first, what is the first operator that we evaluate?

|  |
| --- |
| Multiplication |

* Why is it always safe to convert an integer into a double?

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| Because integer is a smaller bit size of 32 than doubles 64 bits |

* Can you put an assignment operator inside a larger expression?

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| Yes, we can put an assignment operation inside a larger expression. |

* In the video you saw many steps needed to evaluate the expression.   
  Does the computer actually do all these steps, or are these just for teaching purposes?

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| --- |
| The process we went through was what the computer goes through, in a very similar fashion; if not verbatim. |