

Chapter 1 : Introduction to Autocad 2D and 3D Design - Alfred Yarwood - Google Books

Introduction to AutoCAD - Kindle edition by Alf Yarwood. Download it once and read it on your Kindle device, PC, phones or tablets. Use features like bookmarks, note taking and highlighting while reading Introduction to AutoCAD

Application Button - This button displays commands for printing, saving, drawing utilities and other non-drawing tool. Search Bar - Search for text in your drawing or search the help files. Panels - Contain a group of tools Tools - These are the icon that start the commands you use to draw, modify, etc. Tool Tip - If you hover your mouse over a tool, a tool tip will appear to give your more information. Hold it longer for more info. Drawing Space - These is where you draw your designs. Command line - When you type a command, you will see it here. It will give you a lot of information and tell you where you are in the command. Watch this line while learning. Status bar - This allows to see and change different modes of drawing such as Ortho, Osnaps, Grid, Otrack, etc. You can right click this area to toggle between icons and text for this area. The program now allows you to work in different workspaces depending upon what you are working on. For example, the screen will look different if you are working on 2D than it will with 3D work. This set of tutorials will deal with the new new workspace. Since you are a new user, you may as well learn the new interface. In AutoCAD , this is at the top of the screen. Icons, Keystrokes and Menus There are many ways to do things in most Windows programs. AutoCAD is no exception. Everyone will develop a way that works best for him or her. In this course, we will primarily be working with the keystroke commands. The icons work well, but as you will see, icons can be placed anywhere on the screen and can be difficult to find quickly. The pull-down menus will access almost all commands, but are a slower way of doing things. Icons in AutoCAD are found on the ribbon, divided into panels - just click on the appropriate tab to open the panel you need.. If you want to draw a line, you can do it a few ways: At the command line type: All three approaches will do the same thing: The toolbars are a good example of this. You can have the toolbars you use most often on the screen all the time. You can easily make them go away so that you have more drawing space. You can also customize them so you have the most common commands on one toolbar. To remove the ribbon and have the most drawing space available, click on the "Clean Screen" icon in the bottom right corner of the screen. To go back the to the standard display, click again on the same icon. Some terms have links to give you more information but it is not necessary to memorize them all now. It can be customized to suit your needs. Associated Dimensioning Dimensions that are associated with specific points will update as that point is moved. Backup file AutoCAD can be set to automatically backup your drawing and save it. This is a safeguard in case your file gets corrupted. It is saved with a .BAK extension A pre-drawn image you can insert in your drawing to save time and make your file size smaller. Clean Screen A display setting that gives you maximum drawing space. Crosshairs This is your cursor when it is in the drawing space. Cursor Your cursor will change depending on what function it is performing in the program. Database An AutoCAD drawing file is actually one large database containing all the information needed to reproduce the objects when the file is opened. Info for layers and linetypes, etc are stored in this manner. Dialog box AutoCAD uses a large number of dialog boxes to get information from you. You must know how input the information that it asks for. This is a file that contains preset values for frequently used settings. AKA a prototype drawing. The file extension is .DWT. Extents The outer boundaries of the objects you have drawn. Grid This is pattern of dots displayed on the screen to guide you. It can be toggled on and off by pressing the F7 key. Layer All objects are drawn on a layer. You can group objects such as electrical on a single layer and organize your drawing. Layout Tabs A space used for plotting your drawings formerly called Paper Space. All objects are drawn with a particular linetype. Examples would be solid, center, dashed, etc. Modify A generic term used for changing your objects Object.

Chapter 2 : Introduction to AutoCAD - www.nxgvision.com

This text is appropriate for Introductory and Intermediate AutoCAD courses. This modern text addresses advances in technology and introduces students to 2- dimensional drawing skills and commands using the current release of AutoCAD. It continuously builds on concepts covered in previous chapters.

Assignment 1 - Drawing lines to exact points Duplicate the drawing called Assign 1. Click [HERE](#) to see the finished drawing in. You will not have to worry about the title block or text, or dimensioning. Make sure you are comfortable with the co-ordinate system as explained in Lesson When you are finished this assignment, check the printed drawing with a scale ruler. All lines should measure up exactly if all went well. Start AutoCAD and a new drawing by pressing the Application Button top left corner and pressing the new button to reveal the flyout. Once you see the flyout, click on Drawing. There are 3 ways to start a new drawing. Any way you do this, you will see a dialog box open that asks you to select a template drawing to use as shown below: Have a look in your: You will find it there. Of course, you can also copy your templates to a folder that is easier to locate. Also if you find that the grid distracts you, you can press F7 to toggle it on or off. For all lessons on this level, make sure that you do not have Dynamic Input turned on. You can check this on the status bar. Your status bar buttons bottom of the screen should like the image above with the Dynamic Input button grey. Start the LINE command as explained in the table above and draw a line from 1,2 to 3,2 to 3,4 to 1,4 Press enter after each point. For the last line, you can either type in 1,2 or C to close the line back to the first point you entered. You have just drawn a 2" square using absolute co-ordinates. Your command history F2 key should look like this: Next draw a similar box using relative co-ordinates. Start the LINE command and begin at point 4. From there draw a line two units to the right by typing 2,0 this means 2 units in the X direction, 0 units in the Y direction based on the last point you entered. Next type 0,2 then -2,0 then 0,-2 to finish the box. Remember to press enter after each point. Now erase the last box you just drew. Now redraw the box for more practice! Take a moment to think about what you just did. Draw a third box using polar co-ordinate input. Start the LINE command and begin at point 8,2 then enter. What you have just done is drawn a line 1 unit long at 45o, then another at 0 and so on. Do the angles you entered make sense to you? If not, review it. The last thing to draw is the arc curved line that you see in the bottom left square. Now you can enter the center point which will be 1,2. C Specify center point of arc: Try another method in the other square. To finish the drawing, try putting a 10"x7" border around the page starting at 0,0 using the any of the methods shown above relative, absolute or polar. When you have done the assignment, the next step is to print or plot it out. Set it up to print as shown below. Follow these steps for a successful plot see diagram below: Select your printer - laser or inkjet will work fine. For the "Plot Area", select "Extents" - that will plot everything you drew. Select the checkbox to "Center the Plot" on your sheet of paper looks better. If "Fit to Paper" is selected by default, uncheck it and select a scale of 1 inch to 1 paper unit 1: Now Preview your drawing. If your preview looks good, Cancel out of the preview by pressing ESC. You may have to change the paper size in your printer Use the Windows printer settings to do this. You may also have to change the rotation or origin of the plot. Check the Landscape radio button in the Drawing Orientation section. Save your drawing as you would any other Windows file. If you want to check your input, click [HERE](#) to see the commands needed to complete this assignment. This assignment has given you a basic introduction to drawing using a variety of methods. Once you have completed the assignment, practice these methods, as you will be using them often. Your boxes should match the drawing example. They will be the same size and on the same place in the drawing. If you have a ruler, you will see that your lines are life-size 1: From these basic concepts, you can now draw lines anywhere if you know where they should go. The next lessons will add to these commands. As you get used to the AutoCAD interface, you will find it easier and easier to learn the new commands. But for now, mastering the co-ordinate systems, inputting commands and reading the command line should be your priority. Copy this drawing using the same methods as above.

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Chapter 4 : Introduction to AutoCAD - ePub - Alf Yarwood - Achat ebook | fnac

Alf Yarwood provides a practical, structured course of work matched to the latest release of AutoCAD. After introducing first principles and the creation of 2D technical drawings, he goes on to demonstrate the construction of 3D solid drawings, surface model drawings and rendering.

The result is shown in Fig. In this illustration the Object Snap tooltips are shown as they appear when each object is added to the outline. The following example shows the use of some of these abbreviations. Second example – Object Snap abbreviations Fig. Note With Object Snaps off, the following abbreviations can be used: To see the drop-down menu giving the prompts available with Dynamic Input press the down key of the keyboard and click the prompt to be used. To achieve this a click on the Clean Screen icon in the bottom right-hand corner of the AutoCAD window produces an uncluttered workspace area. The command palette can be cleared from screen by entering `commandlinehide` at the command line. These two operations produce a screen showing only title and status bars Fig. Some operators may well prefer working in such a larger-than-normal workspace. When Dynamic Input is in action, tools can be called by using any of the following methods: By entering the name of the tool at the command line. By entering the abbreviation for a tool name at the command line. When Dynamic Input is active and a tool is called, command prompts appear in a tooltip at the cursor position. To continue drawing with Line drag the cursor to a new position and either left-click at the position when the coordinates appear as required Fig. A click on the required prompt in such a pop-up menu will make that prompt active. To start the construction click at any point on screen. The prompt for the polyline appears with the coordinates of the selected point showing. Left-click to start the drawing Fig. Move the cursor and press the down key of the keyboard. A pop-up menu appears from which a prompt selection can be made. In the menu click Width Fig. At the keyboard enter the required width and right-click. Then left-click and enter ending width or right-click if the ending width is the same as the starting width Fig. Drag the cursor to the right until the dimension shows the required horizontal length and left-click Fig. Drag the cursor down until the vertical distance shows and left-click Fig. Drag the cursor to the left until the required horizontal distance is showing and right-click Fig. Press the down key of the keyboard and click Close in the menu Fig.

Chapter 5 : Free AutoCAD Tutorials : Introduction to AutoCAD

Summary. Alf Yarwood provides a practical, structured course of work matched to the latest release of AutoCAD. After introducing first principles and the creation of 2D technical drawings, he goes on to demonstrate the construction of 3D solid drawings, surface model drawings and rendering.

Mostly, it occurs when the brand new readers quit using the eBooks as they are not able to use them with the proper and effectual style of reading these books. There present number of reasons behind it due to which the readers stop reading the eBooks at their first most attempt to make use of them. Yet, there exist some techniques that could help the readers to have a nice and powerful reading experience. Someone should adjust the appropriate brightness of screen before reading the eBook. Because of this they suffer from eye sores and headaches. The best alternative to overcome this severe issue would be to decrease the brightness of the displays of eBook by making particular changes in the settings. You can even adjust the brightness of display depending on the kind of system you are utilizing as there exists bunch of the approaches to adjust the brightness. It is suggested to keep the brightness to potential minimal level as this will help you to increase the time that you could spend in reading and provide you great comfort onto your eyes while reading. An excellent eBook reader should be installed. It will be helpful to really have a good eBook reader to be able to have a great reading experience and high quality eBook display. You may also make use of complimentary software that may offer the readers with many functions to the reader than simply an easy platform to read the desirable eBooks. Apart from offering a place to save all your precious eBooks, the eBook reader software even give you a great number of attributes to be able to enhance your eBook reading experience compared to the conventional paper books. You can even improve your eBook reading encounter with help of alternatives provided by the software program for example the font size, full screen mode, the certain number of pages that need to be displayed at once and also change the color of the background. You ought not make use of the eBook constantly for several hours without breaks. You need to take appropriate rests after specific intervals while reading. Nevertheless, this will not mean that you ought to step away from the computer screen every now and then. Constant reading your eBook on the computer screen for a long time without taking any break can cause you headache, cause your neck pain and suffer with eye sores and in addition cause night blindness. So, it is important to give your eyes rest for a little while by taking breaks after particular time intervals. This will help you to prevent the problems that otherwise you may face while reading an eBook constantly. While reading the eBooks, you must prefer to read big text. So, boost the size of the text of the eBook while reading it on the display. Despite the fact that this may mean you will have less text on each page and greater number of page turning, you will manage to read your desired eBook with great convenience and have an excellent reading experience with better eBook display. It is suggested that never use eBook reader in full screen mode. It is recommended not to go for reading the eBook in fullscreen mode. Although it might appear simple to read with full-screen without turning the page of the eBook fairly frequently, it place ton of pressure on your eyes while reading in this mode. Constantly prefer to read the eBook in the same length that would be similar to the printed book. This is so, because your eyes are used to the span of the printed book and it would be comfy that you read in exactly the same way. By using different techniques of page turn you can also boost your eBook experience. Check out whether you can turn the page with some arrow keys or click a specific part of the screen, apart from utilizing the mouse to manage everything. Favor to make us of arrow keys if you are leaning forwards. Lesser the movement you must make while reading the eBook better will be your reading experience. Technical issues One issue on eBook readers with LCD screens is the fact that it is not going to take long before you strain your eyes from reading. This will help make reading easier. By using every one of these effective techniques, you can definitely improve your eBook reading experience to a great extent. These tips will help you not only to prevent particular hazards which you may face while reading eBook often but also ease you to take pleasure in the reading experience with great comfort. A Modern Perspective mediafire. A Modern Perspective pdf, epub, docx and torrent then this site is not for you. The download link provided above is randomly linked to our ebook promotions or third-party advertisements and not to download the

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Chapter 6 : Introduction to AutoCAD tutorial and video

Introduction to AutoCAD Opening AutoCAD Fig. The AutoCAD shortcut icon on the Windows desktop AutoCAD is designed to work in a Windows.

Chapter 12 Exercise 1. Call the Offset tool from the 2D Draw control panel and offset the ellipse outwards by 2 units:. Open the template acadiso3D. Click on Top in the ViewCube. The command line shows: Subtract the boxes from the polysolid. Close the drawing window. Published by Elsevier Ltd. Page 2 Chapter 12 Exercise 2 1. Chapter 12 Exercise 3 1. Click as shown in illustration to the right and pull away from the selected surface 1 loop extracted. Repeat for another face. Using Presspull pull out two other faces. The result is shown on the next page. Page 3 Chapter 12 Exercise 4 1. Open the template acadiso3d. Call the Offset tool from the 2D Draw control panel and offset the ellipse outwards by 2 units: Make the other ellipse into a region. Make further regions as shown in the drawing to the right. The resulting region can now be revolved. Page 5 Chapter 12 Exercise 5 1. Erase the centre line. Page 6 Chapter 12 Exercise 6 1. With the Polyline tool construct an outline for an extrusion of the angled part of the bracket. Construct a closed polyline of the vertical sloping part of the bracket and the hole at its upper end and extrude the outline and the circle to a height of 6. With Subtract, subtract the hole from the back piece just extruded. In the centre of the lower portion construct two circles of radii 15 and 5 and extrude to a height of Subtract the smaller extrusion from the larger. Construct a polyline outline for the web. Page 7 Chapter 12 Exercise 7 1. Create a new layer of colour magenta. Using the Circle, Polyline and Ellipse tools, construct the four outlines as shown. Using the Region tool form each of the four outlines into a region. With the Subtract tool, subtract the circular and elliptical regions from the rectangular region. Extrude the region so formed to a height of 5 units. Page 18 Chapter 12 Exercise 8 1. Make two new layers coloured magenta and red. Using the Polyline tool, construct two closed plines on the two new layers - one for the top part - red layer, and the other for the vertical part - magenta layer. Set Visual Style to Conceptual. Page 9 Chapter 12 Exercise 9 1. Make a new layer of colour red. Using the Polyline tool, construct two plines on the new layer - one for the path, and the other for the object to sweep. Select Conceptual from Visual Styles. Page 10 Chapter 12 Exercise 10 1. Make four layers of colours red, blue, green and magenta. Construct the two square rectangles and four circles for the lofting. Move the six cross-sections to suitable positions relative to each other. Make the layer colour red current. And the Lofting dialog appears. Make sure the Smooth Fit radio button has a dot in its circle. If it is on click the OK button. The lowest loft appears. Continue lofting the other two lofts. Set the visual style to Realistic. Page 11 Additional exercises 1. A two-view drawing of a pulley wheel is given. Construct a 3D model drawing of the wheel in the following steps: Construct the 3D solid model drawing of a gear wheel as shown in the righthand drawing working to the stages shown in the drawings which follow. Note The illustrations for Exercise 2 on the next page do not show a correct method of drawing gear teeth. The drawings are for illustrative purposes only and for constructing the 3D model for this exercise. The two-view drawing is of a cover. Construct the 3D solid model drawing shown below from the details given in the two-view drawing. Page 13 Multiple choice questions 1. The Region tool can be called by entering the following abbreviation at the command line when using Dynamic Input: When using the Extrude tool which of the following can be extruded? When using the Revolve tool which of the following can be revolved? Why is the name Boolean operators given to the tools Union, Subtract and Intersect? Is it possible to form unions from solids constructed using the Extrude tool with solids formed using the 3D Objects tools?

Chapter 7 : Introduction to AutoCAD : A Modern Perspective by Jim Fitzgerald,# | eBay

Introduction to AutoCAD includes. Hundreds of full-colour drawings and screen-shots illustrating the stages within the design process. Worked examples and exercises throughout the text, linking the use of AutoCAD to realworld engineering practice.

Chapter 8 : Introduction to AutoCAD - CRC Press Book

Introduction to AutoCAD Chapter 15 Exercise 1 Open AutoCAD with a double-click on its shortcut icon in the Windows desktop. (b) Call the Revolve tool from the Home/3D Modeling panel and form the.

Chapter 9 : Introduction to AutoCAD A Modern Perspective - Ebook pdf and epub

Chapter 13 Exercise 3 1. Open AutoCAD with a double-click on its shortcut icon in the Windows desktop. 2. Open the template www.nxgvision.com 3. Make a new layer Outlines of colour black and make it the current layer.