Introduction to AutoCAD 2007

Alf Yarwood

Answers to Multiple choice questions

Chapter 1

1. The toolbar at the top of the AutoCAD 2007 window is:
    (a) The **Draw** toolbar
    (b) The **Modify** toolbar
    (c) The **Standard** toolbar
    (d) The **Properties** toolbar

2. The **DesignCenter** palette can be opened from the:
    (a) **Layer** toolbar
    (b) **Properties** toolbar
    (c) **Modify** toolbar
    (d) **Standard** toolbar

3. Press the **F9** key of the keyboard switches:
    (a) **Grid** on/off
    (b) **Snap** on/off
    (c) **Ortho** on/off
    (d) **Osnap** on/off

4. In the coordinate system of AutoCAD 2007:
    (a) Positive **x** figures are to the left
    (b) Positive **x** figures are to the right
    (c) Positive **x** figures are in the direction vertically upwards
    (d) Positive **x** figures are in the direction vertically downwards.

5. Drawing templates are held in files with the file extension:
    (a) *.dwt
    (b) -*.dwg
    (c) *.bmp
    (d) *.dwr.

6. A *left-click* on a name in a drop-down menu showing three dots (**...**) appearing after the name means that:
    (a) A command name will appear at the command line
    (b) A dialog will appear on screen
    (c) A sub-menu will appear
    (d) A tool will be activated.

7. AutoCAD 2007 can be opened with:
    (a) A *left-click* on the AutoCAD 2007 shortcut icon in the Windows desktop
    (b) By typing **acad** at the keyboard
    (c) Automatically when the computer is switched on
    (d) By selecting from a list which appears on screen when the computer is switched on.

8. The term *dragging* means:
    (a) *Left-click* on an item and the item can be moved to another position on screen
    (b) *Double-click* on an item. The item can then be moved to another point on screen;
    (c) Holding down the left-hand button of the mouse on an item can be moved to another point on screen
    (d) Press the right-hand button of the mouse. This allows an item to be moved anywhere on screen.

9. An arrow appearing after a name in a drop-down menu means that:
    (a) A command name will appear at the command line
    (b) A dialog will appear on screen
    (c) A sub-menu will appear
    (d) A tool will be activated.

10. A tool tip is:

    (a) The tool name appearing in a rectangle when the cursor is placed on a tool icon

    (b) The name given to a tool

    (c) The instruction which appears at the left-hand end of the status bar when a tool is chosen

    (d) A tip which can be read from the **Help** screen for a tool.

Chapter 2

1. To call the **Line** tool from the command line, the following abbreviation can be *entered*:

    (a) lin

    b) li

    (c) l

    (d) ln.

2. When the **F6** key of the keyboard is pressed, the following facility is toggled on/off:

    (a) Snap

    (b) Ortho

    (c) DUCS

    (d) DYN.

3. The key **F9** toggles on/off:

    (a) Snap

    (b) Ortho

    (c) Grid

    (d) DYN.

4. When *entering* **absolute** coordinate numbers at the command line, the coordinates are preceded by:

    (a) The letter **a**

    (b) The symbol **@**

    (c) The letters **ab**

    (d) There is no need to *enter* anything in front of the coordinate numbers

5. The command line abbreviation for the **Circle** tool is:

    (a) cir

    (b) c

    (c) ci

    (d) cl.

6. What are the differences between outlines drawn using the **Line** tool and those drawn using the **Polyline** tool? Outlines from the **Line** tool form separate objects. Those from the **Polyline** tool form single objects.

Chapter 3

1. The **Arc** tool can be called by *entering* the following abbreviation at the command line:

    (a) ar

    (b) a

    (c) ac;

    (d) There is no abbreviation. The name arc must be *entered* in full.

2. The set variable **PELLIPSE** can be set to either **0** or **1** when it allows the following actions:

    (a) When set to **0** the **Edit Polyline** tool to be used on ellipses

    (b) When set to **1** the **Edit Polyline** tool to be used on ellipses

    (c) When set to **0** it allows ellipses to be drawn with the major axis at any angle

    (d) When set to **0** ellipses become polylines.

3. When saving an AutoCAD 2007 drawing it is filed with the extension:

    (a) *.drw

    (b) *.dwg

    (c) *.dwt

    (d) *dg.

4. The **Dynamic Input** (**DYN**) system can be toggled on/off by pressing which key of the keyboard:

    (a) F6

    (b) F7

    (c).F12

    (d) F3.

5. What is the function of *entering* **commandline** at the keyboard:

    (a). It enables the command line to be used for *entering* command

    (b). It brings back the command palette when it has been hidden

    (c). It can only be used when **DYN** is set on to allow Dynamic Input to work

    (d). It places the command palette at the bottom of the screen.

6. The **Polyline Edit** tool can only be used when working with polylines:

    (a) True

    (b) False.

Chapter 5

1. What is the purpose of the set variable **MIRRTEXT**:

    (a} To ensure that text is mirrored correctly

    (b) To enable text to be mirrored with a drawing, when the **Mirror** tool is in use

    (c) To make sure that text is deleted from drawings when acted upon by the **Mirror** tool

    (d) To show text clearly in drawings acted upon by the **Mirror** tool.

2. When using the **Rotate** tool the angle of rotation is in the following direction:

    (a) Clockwise

    (b) Anticlockwise

    (c) The direction in which the cursor is moved

    (d) There is no fixed rotation direction.

3. When using the **Stretch** tool:

    (a) Circles can be stretched into ellipses

    (b) The tool has no effect upon circles

    (c) Be careful because circles can be erased

    (d) Treat circles like any other part of the drawing being stretched.

4. When using the **Break** tool on circles and/or arcs:

    (a) Breaks can be made in any direction

    (b) Breaks can only be made in a clockwise direction

    (c) Breaks can only be made in an anticlockwise direction

    (d) Break cannot be made in circles or arcs.

5. The **Join** tool can be used for joining:

    (a) Any two arcs

    (b) Only arcs or lines in line with each other

    (c) Any two lines or plines

    (d) Any objects can be joined to each other.

Chapter 6

1. When dimensioning from the command line what do the following abbreviations mean?

    (a) hor? horizontal

    (b) ver? vertical

    (c) int? intersect

    (d) per? perpendicular

2. An aligned dimension is one which:

    (a) Is aligned to the previous dimension;

    (b) Is in line with the object being dimensioned

    (c) Can only be used when placing a dimension with a radius

    (d) Is lined up with the edges of the drawing area of AutoCAD.

3. There are two types of fonts which can be used when adding text to drawings in AutoCAD 2007. Name them. **AutoCAD SHX** and **Windows True Type**

4. The "style name" of a text refers to:

    (a) The font in use

    (b) The height of the text

    (c) Whether the text is in **bold**, *italic* or normal;

    (d) Whether the text is **AutoCAD SHX** or **Windows True Type**.

5. The difference between **Singleline** text and **Multiline** text is:

    (a) Only one line of text can be added to a drawing with **Single Line text**, whereas many lines of text can be added using **Multiline** text

    (b) Singleline text is text *entered* directly at the command line. **Multiline** text must be *entered* in a window

    (c) There is no difference

    (d) Singleline text can be added in one style only. **Multiline** text can be added in any style.

Chapter 7

1. In first angle orthographic projection an end view is:

    (a) Always placed to the right of the front view

    (b) Viewed from the one side and placed on the other side of the front view

    (c) Always placed to the left of the front view

    (d) Placed either side of the front view irrespective of the viewing position

2. In third angle orthographic projection a plan is:

    (a) Placed either above or below the front view depending upon whether the viewing is from above or below

    (b) Always placed above the front view

    (c) Always placed below the front view

    (d) Placed either above or below no matter which viewing direction is chosen.

3. Isometric drawing is:

    (a) A true 3D (three-dimensional) pictorial view of the object being drawn

    (b) A 2D (two-dimensional) pictorial view of the object

    (c) An accurate perspective drawing of the object

    (d) None of the items **a**, **b** or **c**.

4. If a layer is locked:

    (a) Details can be added to a locked layer

    (b) Details can be erased from a locked layer

    (c) Details cannot be added or erased from a locked layer

    (d) Details can be added to a locked layer but they disappear when the drawing file is saved.

5. When a layer is turned off:

    (a) File space is saved when saving the file

    (b) It makes no real difference. Details can still be added to the layer

    (c) Details cannot be erased from the layer

    (d) Details on the layer cannot be seen.

Chapter 8

1. Associative hatching is a term given to:

    (a) Types of hatching which can be joined together

    (b) Hatching which is associated with the colour of the area being hatched

    (c) Hatching which is associated with objects which are moved within a hatched area

    (d) Hatching which is associated with a hatched area from another part of a drawing.

2. The **Hatch and Gradient** dialog can be called to screen:

    (a) By *clicking* the **Hatch** tool icon in the **Draw** toolbar

    (b) By *entering* the abbreviation **h** at the command line

    (c) By *entering* **hatch** at the command line

    (d) By any one of the choices as given in **a.**, **b.** or **c**.

3. When hatching a sectional view in an engineering drawing
    (a) Every detail cut by a section plane must be hatched
    (b) It is up to the operator constructing the drawing which parts are hatched
    (c) There is no need to hatch any part of the drawing
    (d) A bolt within a sectional view is not hatched.

4. When **Advanced** hatching is set to **Normal** all parts of a drawing will be hatched:
    (a) True?
    (b) False?

5. When text is *entered* in a hatched area:
    (a) The text will be surrounded by a non-hatched area only if **Advanced Normal** is set on
    (b) The text will be surrounded by a non-hatched area only if **Advanced Outer** is set on
    (c) The text will be surrounded by a non-hatched area only if **Advanced Ignore** is set on;
    (d) The text will be surrounded by a non-hatched area if any of the **Advanced** settings are set on.

Chapter 9

1. Which of the following is correct?
    (a) When a block has been constructed and saved the data is saved as file with a name in a named directory
    (b) When a block has been constructed and saved, the file data is saved as part of the file in which the block was constructed
    (c) When a block has been constructed and saved, the file data is saved as a separate file from the drawing in which the block was constructed
    (d) When a block has been constructed and saved, the file data is saved as new file.

2. Which of the following is correct?
    (a) When a wblock has been constructed and saved the data is saved as file with a name in a named directory
    (b) When a wblock has been constructed and saved, the file data is saved as part of the file in which the block was constructed
    (c) When a wblock has been constructed and saved, the file data is saved as a separate file from the drawing in which the block was constructed
    (d) When a wblock has been constructed and saved, the file data is saved as new file.

3. The **DesignCenter** is:
    (a) A drop-down menu
    (b) A dialog
    (c) A palette
    (d) A *right-click* menu.

4. Which of the following statement is correct?
    (a) The **Purge** tool can only be used when inserting blocks
    (b) The **Purge** tool can be use to delete unwanted detail from any drawing
    (c) The **Purge** tool can only be used only for deleting exploded blocks from drawings
    (d) The **Purge** tool can only be called by *entering* **purge** at the command line;

Chapter 10

1. When copying a drawing constructed in AutoCAD 2007 using the **Copy** command from the **Edit** drop-down menu, the drawing can be pasted into documents being worked in other applications. The method of copying and pasting makes use of:
    (a) A DXF file
    (b) An EPS file
    (c) Any item in any application can be automatically copied into another application
    (d) The drawing is transferred via the **Clipboard**.

2. When a drawing is saved as an EPS file and the EPS file is inserted into a document being worked in another application:

(a) Changes made in the AutoCAD drawing will automatically be updated to change in the drawing in the other application

(b) Changes made in the AutoCAD drawing are not reflected in the document into which the drawing has been inserted

(c) Changes made in the AutoCAD drawing are only changed in the inserted drawing after both the drawing and the document have been saved to file

(d) It does not matter whether the drawing is changed or not, no changes will be reflected in the other document.

3. The reason for saving an AutoCAD drawing as a DXF file is:

(a) The DXF file can be opened in any other Computer Aided Design (CAD) application

(b) DXF files take up less space on a file than the AutoCAD DWG file

(c) DXF files can be opened in a Microsoft Word document

(d) DXF files can be opened in earlier releases of AutoCAD.

4. External references (xrefs) can be described as:

(a. They are the same as blocks and are saved within the drawing file in which they were constructed, but can be inserted in other drawings

(b) They are different to blocks in that changes in an original external reference are reflected in the drawing in which the xref is inserted

(c) They are blocks which are saved to file names in their own right

(d) They are files which refer to parts within a drawing.

5. Which files with the following file name extensions are "raster" files?

(a) *.bmp

(b) *.dwg

(c) *.tif

(d) *.dxf

(e) *.jpg

(f) *.eps

(g) *.pcx

Chapter 11

1. An AutoCAD sheet set is:

(a) A number of drawings which have been printed from AutoCAD drawings and saved in an envelope

(b) A series of printed AutoCAD drawings

(c) A number of AutoCAD drawings saved in Paper Space format and held in a file

(d) Any drawings relating to a specific architectural, building or engineering process.

2. Drawing for a sheet set must be:

(a) Saved in Model Space format

(b) Saved in Paper Space format

(c) Saved in either Model Space or Paper Space format

(d) Saved in *.dwf format.

3. DWF is an abbreviation for a file extension. The abbreviation stands for:

(a) Drawing with files

(b) Design with file

(c) Design Web File

(d) Design Web Format.

4. DWF files can be included as attachments in an email. Is this statement:

(a) True

(b) Only partly true

(c) Incorrect

(d) Only when sent as a Zip file.

Chapter 13

1. The **Region** tool can be called by *entering* the following abbreviation at the command line when using **Dynamic Input**:
    (a) re
    (b) reg
    (c) regi
    (d) There is no abbreviation for this command.

2. When using the **Extrude** tool the set variable **ISOLINES** must be set to:
    (a) 4
    (b) 16
    (c) Any number
    (d) Any number below 2047.

3. When using the **Extrude** tool which of the following can be extruded?
    (a) Regions
    (b) An outline constructed using the **Line** tool
    (c) Circles
    (d) Closed plines
    (e) Ellipses
    (f) Any outline
    (g) Another extrusion.

4. When using the **Revolve** tool which of the following can be extruded?
    (a) Regions
    (b) An outline constructed using the **Line** tool
    (c) Circles
    (d) Closed plines
    (e) Ellipses
    (f) Any outline
    (g) Another solid of revolution.

5. Can the **Union** tool be used to form 3D solid drawings from a number of objects constructed using any of the **3D Objects** tools **Box**, **Sphere**, **Cylinder**, **Cone**, **Torus** and **Wedge**?
    (a) Yes
    (b) No
    (c) Only from the **Box** and **Cone** tools
    (d) Yes, but not from the **Torus** tool.

6. Which of the following **Modify** tools can be used when constructing 3D solid model drawings - **Move**, **Copy**, **Chamfer**, **Fillet**, **Mirror**, **Rotate**, **Scale**
    (a) None of them
    (b) Only the **Chamfer** and **Fillet** tools
    (c) Any of them
    (d) Only **Move** and **Copy**.

7. Why is the name **Boolean** operators given to the tools **Union**, **Subtract** and **Intersect**?
    (a) It is the name made up for this purpose by computer programmers
    (b) It is just a name selected for this purpose
    (c) It is based on the name of the scientist George Boole
    (d) Boolean is a name always given to this type of construction.

8. Is it possible to form unions between solids constructed using the **Extrude** tool and solids formed using the **3D Objects** tools?
    (a) Yes
    (b) No
    (c) Only when the **3D Objects** tool is the **Box** or **Sphere** tool
    (d) Only when the **3D Objects** tool is the **Cone** tool.

Chapter 14

1. When constructing 3D model drawings in multiple viewports:
    (a) The set variable **UCSFOLLOW** must be set to on
    (b) The set variable **UCSFOLLOW** must be set to off
    (c) It does not matter whether the set variable **UCSFOLLOW** is set on or off
    (d) The set variable **UCSFOLLOW** must be set to **3**.

2. When constructing 3D model drawings in multiple viewports:
    (a) The UCS icons must not be showing in each viewport
    (b) It does not matter whether the UCS icons are showing in viewports or not
    (c) The UCS icon must be showing in the isometric view viewport
    (d) The UCS icon must be showing in the Front and Plan viewports.

3. When constructing 3D model drawings in multiple viewports:
    (a) Each viewport must be set independently to different viewpoints from the **View/3D Views** menu
    (b) Only when working in a particular viewport will its viewpoint need to be set
    (c) Each viewport is set to different viewpoints when a multiple viewport is chosen from the **Viewports** dialog
    (d) Each viewport is set to different viewpoints when a multiple viewport is chosen from the **Viewports** dialog only if the **Setup** popup list is set to **3D**.

Chapter 15

1. Is it possible to construct a polar array from a 3D solid model drawing using the **Array** tool from the **Modify** toolbar?
    (a) No
    (b) Yes
    (c) If your answer is Option **a** or **No**, with which tool can one construct an array from a 3D solid model drawing
    (d) Only if the 3D solid model drawing is placed in the World UCS.

2. From which of the following toolbars can the **Mass Properties** tool be called?
    (a) Modify
    (b) Draw
    (c) Standard
    (d). Inquiry

3. The purpose of the **Viewpoint Presets** dialog is:
    (a) To set a 3D solid model drawing in any form of viewing position
    (b) To set a 3D solid model drawing in an isometric view
    (c) To set a 3D solid model drawing in a perspective view
    (d) To set a 3D solid model drawing is an orthographic view.

4. The **Slice** tool is used for slicing a 3D solid model into:
    (a) Two parts
    (b) Two parts ready for the calling of the **Section** tool
    (c) Into as many parts as are required
    (d) To remove a part not wanted in a 3D solid model drawing.

5. When using the **Section** tool on a 3D solid model drawing:
    (a) Hatching of the resulting sectional view is automatic
    (b) The section outline must be removed from the 3D solid model drawing
    (c) Only a sectional view outline is formed
    (d) The resulting sectional view automatically appears as a separate view in the drawing area.

6. Before viewing positions can be set from the **Viewpoint Preset** dialog the set variable **UCSFOLLOW** must first be set:
    (a) On
    (b) Off
    (c) To the figure of **2**
    (d) It does not matter whether it is set on or off.

7. Is it possible to mirror a 3D solid model drawing using the **Mirror** tool from the **Modify** toolbar?

    (a) No

    (b) Yes

    (c) If your answer is Option **a** or **No**, with which tool can one mirror a 3D solid model drawing?

    (d) Only if the 3D solid model drawing is placed in the World UCS.

Chapter 16

1. Can **Ambient** lighting be set at a figure before rendering a 3D model?

    (a) Yes

    (b) No

    (c) Requires a setting in a dialog

    (d) Set to a figure of 0.3.

2. When setting lighting before rendering a 3D model **Distant** light can be described as:

    (a) A light the value of which diminishes in intensity the further the light position is set from the 3D model

    (b) Its light value is of the same intensity no matter how far the light position is set from the 3D model

    (c) Its intensity increases when set in front and above the 3D model compared with its being set to the side and above the model

    (d) A light which sheds rays in all directions from its set position.

3. Which in your opinion gives the best rendering results;

    (a) Medium

    (b) High

    (c) Presentation

    (d) They are all as good as each other?

4. When printing or plotting a 3D model, which of the following statements is correct:

    (a) A rendered 3D model in a single viewport can be plotted in full colour

    (b) A Conceptual shaded 3D model in a single viewport can be plotted in full colour

    (c) A four-view viewport screen of a rendered 3D model in Model Space can be plotted in full colour

    (d) A four-view viewport screen of a Realistic shaded 3D model in Model Space can be plotted in full colour.

Chapter 17

1. The term **UCS** stands for:

    (a) User Coordinate State

    (b) Using Cordinates Screen

    (c) User Coordinate System

    (d) User Coordinate Set.

2. Before the **UCS** system can be used:

    (a) The set variable **UCSFOLLOW** must be set to **1**

    (b) The set variable **UCSFOLLOW** must be set to **0**

    (c) It does not matter whether the set variable **UCSFOLLOW** is set to any number, the UCS system will still operate

    (d) The set variable **UCSFOLLOW** does not need to be set because it becomes operative when the UCS is in use..

3. Before the **UCS** system can be used, the **UCS icon**:

    (a) Must be showing somewhere on screen

    (b) Need not appear anywhere on screen

    (c) Must be showing at the bottom left-hand corner of the screen

    (d) The UCS icon can only show on screen if the setting of the set variable **UCSFOLLOW** is correct.

4. The term **UCS WORLD** applies to:
  (a) The plane on which the operator is working at the time
  (b) The standard **XY** plane which appears when AutoCAD is loaded on screen
  (c) Any one of the orthogonal planes
  (d) Any plane set when working in the UCS.
5. A 2D outline constructed using the line and circle tools can be extruded to form a 3D model:
  (a) Yes
  (b) No
  (c) Only if is first made into a region
  (d) Either if it first made into a region or if its outline is edited to form a closed polyline.

Chapter 18

1. When constructing 3D Surface models the **Boolean** operators **Union**, **Subtract** and **Intersect**:
  (a) Can be used to form single 3D surface models
  (b) Cannot be used to form single 3D surface models
  (c) Can only be used to form single 3D surface models when the parts are formed from the 3D Objects tools
  (d) Can only be used to form single 3D surface models when the parts are formed from the use of the tools **Revsurf**, **Edgesurf**, **Tabsurf** or **Rulesurf**.
2. The set variables for setting the density of the surface meshes of 3D surface models are:
  (a) Isolines
  (b) Tabsurf
  (c) Surftab
  (d) Surfdens.
3. 3D models can be formed from a mixture of 3D solid and 3D surfaces:
  (a) True
  (b) False
  (c) Only if the surfaces are formed using the 3D Objects tools
  (d) Only when the 3D solids are extrusions.
4. 3D surface models can be rendered:
  (a) True
  (b) False
  (c) Only if materials have been attached to the surfaces
  (d) Only if materials have been attached and lighting added to the scene.
5. A surface formed by using the **Rulesurf** tool requires:
  (a) At least four outlines
  (b) Any number of outlines
  (c) Two outlines
  (d) An outline and a path.

Chapter 19

1. When calling the **Extrude** tool the following abbreviation can be *entered* at the command line::
  (a) ex
  (b).extr
  (c) There is no abbreviation. The name **extrude** must be *entered* in full
  (d) ext.
2. When a selected face of a 3D solid model drawing is selected by the **Move Faces** tool from the **Solids Editing** toolbar, the face is:
  (a) Moved away from the 3D solid as a separate entity
  (b) Moved in such a manner that the body of the 3D solid to which the face is attached is extruded
  (c) Moved to be placed on another 3D model
  (d) The whole of the 3D model is moved.

3. Is it possible to use the **Extrude faces** tool from the **Solids Editing** toolbar on a region constructed from a closed polyline?

    (a) Yes, any region can have its face extruded using this tool

    (b) Yes, if the region has not been obtained by using any of the Boolean operators

    (c) No - a region of any type cannot be acted upon by this tool

    (d) Yes, providing the line of extrusion is a straight line or polyline.

4. The **Boolean** operators - **Union**, **Subtract** and **Intersect** tools are found in the toolbar:

    (a) Modeling

    (b) UCS

    (c) Solids Editing

    (d) UCS II.

Chapter 20

1. The **Solprof** tool is used for the following purpose:

    (a) To produce a profile for a 3D solid model drawing in a database

    (b) To produce an outline-only drawing from a 3D solid model drawing

    (c) To provide a profile similar to a front view from a 3D solid model drawing

    (d) To change a 3D solid model drawing from a Model Space drawing to a Paper Space drawing.

2. A polygonal viewport can be constructed in a Model Space viewport:

    (a) This is not true. A polygonal viewport can only be constructed in Paper Space viewports

    (b) Yes. A polygonal viewport can be constructed in either Model Space or Paper Space

    (c) Yes. A polygonal viewport can be constructed in Model Space by *clicking* the **MODEL** button when in paper Space

    (d) Yes providing there is only a single viewport on screen.

3. A drawing can only be printed or plotted from a Paper Space drawing:

    (a) This correct

    (b) Yes - providing the **MODEL** button has been *clicked*

    (c) Drawings can be printed or plotted from either Model Space or Paper Space

    (d) Drawings can only be printed to a printer from Paper Space, but plotted only from Model Space.

4. A file name with the following extension shows that the file is a raster file:

    (a) *.dwg

    (b) *.dwt

    (c) *.bmp

    (d) *.dxf.

5. When a photograph has been inserted in an AutoCAD drawing on screen, when the drawing is printed or plotted, the photograph does not print or plot with the drawing:

    (a) This is correct

    (b) This is not true. The photograph will print or plot along with the drawing

    (c) This is true only if the photograph was inserted in a drawing in paper Space

    (d) This is true only if the photograph was inserted in a drawing in Model Space.

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