

Autodesk® AutoCAD® 2014 Fundamentals

Elise Moss



Visit the following websites to learn more about this book:



[amazon.com](https://www.amazon.com)

[Google books](https://books.google.com)

[BARNES & NOBLE](https://www.barnesandnoble.com)

Table of Contents

Preface	i
Acknowledgements	ii
Classroom Setup	iii
Lesson 1.0 – The AutoCAD Environment	
Exercise 1-1: User Interface	1-3
Exercise 1-2: Using the Mouse	1-7
Exercise 1-3: Dynamic Input	1-24
Exercise 1-4: Create an Autodesk 360 Account	1-27
Exercise 1-5: Create a Profile	1-30
Exercise 1-6: Export a Profile	1-33
Review Questions	1-35
Lesson 2.0 – View Commands	
Exercise 2-1: Real Time Zoom	2-7
Exercise 2-2: Zoom and Regen	2-10
Exercise 2-3: Saving Named Views	2-14
Exercise 2-4: Multiple Viewports	2-19
Exercise 2-5: Viewing Drawings	2-24
Exercise 2-6: View Commands	2-25
Review Questions	2-26
Lesson 3.0 – Drawing Lines	
Exercise 3-1: Line using Direct Distance Method	3-6
Exercise 3-2: Parametric Constraints	3-11
Exercise 3-3: Line using Polar Tracking	3-15
Exercise 3-4: Line using Cartesian Coordinates	3-17
Exercise 3-5: Absolute Coordinates	3-20
Exercise 3-6: Relative Coordinates	3-21
Exercise 3-7: Polar Coordinates	3-22
Exercise 3-8: Drag Method	3-23
Exercise 3-9: Erase	3-25
Review Questions	3-26

Lesson 4.0 – Draw Commands

Exercise 4-1: Polyline	4-6
Exercise 4-2: Polyline	4-8
Exercise 4-3: Polygon	4-10
Exercise 4-4: Rectangle	4-13
Exercise 4-5: Arc	4-16
Exercise 4-6: Circle and Donut	4-20
Exercise 4-7: Spline	4-23
Exercise 4-8: Ellipse and Ellipse Arc	4-25
Exercise 4-9: AddSelected	4-29
Exercise 4-10: Standard Bracket	4-31
Exercise 4-11: Simple House	4-32

Review Questions 4-33

Lesson 5.0 – Modify Commands

Exercise 5-1: Copy	5-3
Exercise 5-2: Copy Multiple	5-4
Exercise 5-3: Mirror	5-6
Exercise 5-4: Mirror Text	5-7
Exercise 5-5: Offset	5-10
Exercise 5-6: Rectangular Array	5-13
Exercise 5-7: Rectangular Array at an Angle	5-14
Exercise 5-8: Polar Array	5-16
Exercise 5-9: Path Array	5-17
Exercise 5-10: Associative Array	5-19
Exercise 5-11: Move	5-22
Exercise 5-12: Rotate	5-25
Exercise 5-13: Rotate using Reference	5-27
Exercise 5-14: Rotate and Copy	5-28
Exercise 5-15: Scale	5-30
Exercise 5-16: Scale using Reference	5-31
Exercise 5-17: Stretch	5-33
Exercise 5-18: Trim	5-36
Exercise 5-19: Extend	5-39
Exercise 5-20: Fillet	5-42
Exercise 5-21: Undo and Redo	5-44
Exercise 5-22: Modify Commands	5-45

Review Questions 5-46

Lesson 6.0 – Selecting Objects

Exercise 6-1: Selecting Objects	6-4
Exercise 6-2: Selecting Objects using Properties	6-6
Exercise 6-3: Select Similar	6-8
Exercise 6-4: Quick Select	6-11
Exercise 6-5: Customize Quick Properties	6-13
Exercise 6-6: Use Quick Properties	6-14
Exercise 6-7: Selection Cycling	6-16

Review Questions	6-18
-------------------------	------

Lesson 7.0 – Object Properties

Exercise 7-1: Layer Control	7-5
Exercise 7-2: Drawing on Layers	7-14
Exercise 7-3: Creating Layers	7-17
Exercise 7-4: Rename Layers	7-20
Exercise 7-5: Identifying Layers	7-22
Exercise 7-6: Using the Layer Translator	7-24
Exercise 7-7: Match Properties	7-28
Exercise 7-8: Properties	7-31
Exercise 7-9: Change Properties	7-33
Exercise 7-10: Organize Your Drawing	7-35

Review Questions	7-36
-------------------------	------

Lesson 8.0 – Drafting Settings and Object Snaps

Exercise 8-1: Drafting Settings	8-3
Exercise 8-2: Object Snap	8-8
Exercise 8-3: Object Snap	8-10
Exercise 8-4: Running Object Snap	8-12
Exercise 8-5: Extended Intersection Object Snap	8-14
Exercise 8-6: Object Tracking	8-15
Exercise 8-7: Drawing Layout	8-22

Review Questions	8-23
-------------------------	------

Lesson 9.0 – Dimensions

Exercise 9-1: Linear and Aligned Dimensions	9-5
Exercise 9-2: Accessing the Dimension Toolbar	9-7
Exercise 9-3: Continuous and Baseline Dimensions	9-8
Exercise 9-4: Angular, Radius and Diameter Dimensions	9-10
Exercise 9-5: Quick Dimension	9-13
Exercise 9-6: Ordinate Dimensions	9-19
Exercise 9-7: Dimension Space	9-21
Exercise 9-8: Dimension Break	9-23
Exercise 9-9: Dimension Styles	9-28
Exercise 9-10: Edit Dimension	9-35
Exercise 9-11: Edit Dimension Text	9-37
Exercise 9-12: Edit Dimension using Grips	9-38
Exercise 9-13: Edit Dimension using Stretch	9-40
Exercise 9-14: Dimension Constraints	9-42
Exercise 9-15: Dimensioning a Drawing	9-44
Exercise 9-16: Dimensioning a Drawing	9-45
Exercise 9-16: Reassociate Dimensions	9-46
Review Questions	9-49

Lesson 10.0 – Text Tools

Exercise 10-1: Single Line Text	10-4
Exercise 10-2: Single Line Text Options	10-5
Exercise 10-3: Multiline Text	10-10
Exercise 10-4: Formatting Multiline Text	10-11
Exercise 10-5: Creating Text Styles	10-15
Exercise 10-6: Purging Text Styles	10-17
Exercise 10-7: Edit Text	10-20
Exercise 10-8: Edit Text Properties	10-21
Exercise 10-9: Edit Text with Grips	10-23
Exercise 10-10: Edit Text Properties	10-24
Exercise 10-11: Spell Check	10-27
Exercise 10-12: Adding Fields to Objects	10-29
Exercise 10-13: Adding a Table	10-32
Exercise 10-14: Exporting a Table	10-36
Exercise 10-15: Adding Blocks and Symbols to a Table	10-37
Review Questions	10-39

Lesson 11.0 – Titleblocks and Templates

Exercise 11-1: Define Attribute	11-4
Exercise 11-2: Inserting a Title Block	11-14
Exercise 11-3: Create a Template	11-17
Exercise 11-4: Use a Template	11-20
Review Questions	11-21

Lesson 12.0 – Viewports and Layouts

Exercise 12-1: Creating a New Layout	12-4
Exercise 12-2: Adding a Viewport	12-7
Exercise 12-3: Converting Existing Dimensions to Annotative	12-10
Exercise 12-4: Using Annotative Scales	12-13
Exercise 12-5: Rotating a Viewport	12-15
Exercise 12-6: Controlling Viewport Properties	12-16
Exercise 12-7: Nonrectangular Viewport	12-18
Exercise 12-8: Layout Wizard	12-23
Exercise 12-9: Controlling Layers per Viewport	12-27
Exercise 12-10: Layout Setup	12-34
Exercise 12-11: Create a New Sheet Set	12-36
Exercise 12-12: Add a Sheet to a Sheet Set	12-39
Exercise 12-13: Creating a Sheet List Table	12-40
Exercise 12-14: Publishing a Sheet Set	12-43
Review Questions	12-45

About the Author