

Extending Lines	46
Trimming Lines	47
If You Would Like More Practice...	51
Are You Experienced?	52

CHAPTER 3 Setting Up a Drawing 53

Setting Up the Drawing Units	54
Setting Up the Drawing Size	58
Using the Grid.	59
Setting Up Drawing Limits	62
Drawing with Grid and Snap	66
Taking a Closer Look at Dynamic Display	69
Saving Your Work	72
Summarizing AutoCAD's Units	74
Using Linear Units	74
Using Angular Units	75
Are You Experienced?	76

CHAPTER 4 Gaining Drawing Strategies: Part 1 77

Laying Out the Walls	78
Creating a Polyline	78
Creating the Exterior Wall Lines	82
Creating the Interior Walls	84
Cutting Openings in the Walls	92
Creating Doors	100
Drawing Swinging Doors	100
Copying Objects	108
Mirroring Objects	110
Finishing the Swinging Doors	112
Drawing a Sliding Glass Door	114
If You Would Like More Practice...	124
Creating an Alternate Sliding-Glass Door	124
Creating an Addition to the Cabin	125
Drawing Three Views of a Block	126
Are You Experienced?	128

CHAPTER 5 Gaining Drawing Strategies: Part 2 129

Drawing the Steps and Thresholds	132
Drawing the Front Step	132
Drawing the Back Step	136
Drawing the Thresholds	139
Drawing the Balcony: Drawing Circles	142
Laying Out the Kitchen	146
Drawing the Counter	147
Drawing the Stove and Refrigerator	150
Completing the Stove	151
Drawing the Kitchen Sink	155
Constructing the Bathroom	157
Setting Running Object Snaps	157
Drawing a Shower Unit	159
Drawing the Bathroom Sink	162
Positioning a Toilet	163
If You Would Like More Practice	168
Drawing the Cabin Again	168
Drawing Something Else	168
Drawing Some Furniture for the Cabin	168
Drawing a Gasket	169
Drawing a Parking Lot	171
Are You Experienced?	172

CHAPTER 6 Using Layers to Organize Your Drawing 173

Using Layers as an Organization Tool	174
Setting Up Layers	176
Assigning Objects to Layers	189
Turning Off and Freezing Layers	198
Drawing the Headers	200
Drawing the Roof	203
Assigning an Individual Linetype Scale Factor	207
Setting Properties of Layers and Objects	213
Creating Layer States	214
If You Would Like More Practice	218
Experimenting with Linetypes and Linetype Scales	218
Setting Up Layers for Your Own Trade or Profession	219
Are You Experienced?	220

CHAPTER 7	Combining Objects into Blocks	221
	Making a Block for a Door	222
	Inserting the Door Block	226
	Using Dynamic Blocks	235
	Finding Blocks in a Drawing	236
	Using Grips to Detect a Block	236
	Using the List Command to Detect a Block	236
	Using the Properties Palette to Examine a Block	239
	Creating a Window Block	240
	Inserting the Window Block	245
	Rotating a Block During Insertion	246
	Using Guidelines When Inserting a Block	249
	Using Object Snap Tracking and Polar Tracking to Insert a Block	251
	Finishing the Windows	256
	Revising a Block	259
	Sharing Information Between Drawings	263
	Dragging and Dropping Between Two Open Drawings	263
	Using AutoCAD's DesignCenter	266
	Using Other Ways to Share Information Between Drawings	272
	If You Would Like More Practice...	279
	Are You Experienced?	280
CHAPTER 8	Controlling Text in a Drawing	281
	Setting Up Text Styles	282
	Determining Text and Drawing Scale	282
	Defining a Text Style for Room Labels	284
	Using Single-Line Text	288
	Placing Titles of Views in the Drawing	288
	Placing Room Labels in the Floor Plan	290
	Using Text in a Grid	296
	Creating a Title Block and Border	306
	Using Multiline Text	322
	Exploring Other Aspects of Multiline Text	332
	If You Would Like More Practice...	337
	Are You Experienced?	338

CHAPTER 9 Using Dynamic Blocks and Tables 339

Using Attributes for a Grid 340

 Defining Blocks with Attributes 345

 Inserting Blocks with Attributes 346

 Editing Attribute Text 348

Setting Up Multiple Attributes in a Block 350

 Defining a Block with Multiple Attributes. 353

 Inserting the Room_Info Block. 357

 Controlling the Visibility of Attributes 359

 Editing Attributes 360

 Exploring Other Uses for Attributes 362

Creating a Dynamic Block. 363

 Setting Up Parameters and Actions. 365

 Fine-Tuning the Dynamic Block with the Properties Palette 367

 Inserting a Dynamic Block 369

Creating a Table. 375

 Defining a Table Style 375

 Designing a Table 378

If You Would Like More Practice. 385

Are You Experienced? 386

CHAPTER 10 Generating Elevations 387

Drawing the Front Elevation. 388

 Setting Up Lines for the Heights 390

 Using Grips to Copy Lines. 392

 Trimming Lines in the Elevation 395

 Drawing the Roof in Elevation 398

 Putting in the Door, the Step, and the Windows. 402

 Adding the Finishing Touches. 408

Generating the Other Elevations. 409

 Making the Rear Elevation 409

 Revising the Rear Elevation 412

 Making the Left and Right Elevations. 416

Considering Drawing Scale Issues. 422

Drawing Interior Elevations 422

If You Would Like More Practice. 423

Are You Experienced? 424

CHAPTER 11 Working with Hatches and Gradients 425

Hatching the Front Elevation 426

 Looking at Hatch Patterns 430

 Hatching the Rest of the Front Elevation 432

 Adding Special Effects 437

Using Hatches in the Floor Plan 442

 Hatching the Floors 442

 Finishing the Hatches for the Floors 445

Modifying the Shape of Hatch Patterns 448

Creating and Managing Tool Palettes 449

 Creating a New Tool Palette 450

 Setting Up a Palette for Hatches 452

 Creating a Palette for Commands 454

If You Would Like More Practice 455

 Creating a Hatch Pattern for the Roof in Plan View 455

 Creating Your Hatch Palette 457

Are You Experienced? 458

CHAPTER 12 Dimensioning a Drawing 459

Introducing Dimension Styles 460

 Making a New Dimension Style 460

Placing Dimensions on the Drawing 476

 Placing Horizontal Dimensions 477

Using Other Types of Dimensions 486

 Using Radial Dimensions 486

 Using Leader Lines 490

 Using Aligned and Angular Dimensions 494

Modifying Dimensions 498

 Modifying Dimension Text 499

 Using Dimension Overrides 503

 Dimensioning Short Distances 504

If You Would Like More Practice 506

 Dimensioning the Garage Addition 506

 Dimensioning to a Centerline 507

 Doing Other Exercises 509

Are You Experienced? 510

CHAPTER 13 Managing External References 511

Drawing a Site Plan	512
Using Surveyor's Units	512
Drawing the Driveway	516
Setting Up an External Reference	520
Using the External References Palette	520
Moving and Rotating an Xref	522
Modifying an Xref Drawing	525
Modifying an Xref by Making It the Current Drawing	525
Modifying an Xref from Within the Host Drawing	528
Adding an Image to a Drawing	532
Putting Xrefs to Use	533
Exploring Additional Xref Features	535
Setting the Xref Path	535
Binding Xrefs	537
Exploring the Other Features of Xrefs	538
If You Would Like More Practice	539
Are You Experienced?	540

CHAPTER 14 Using Layouts to Set Up a Print 541

Setting Up Layouts	542
Moving the Border to the Layout	549
Creating the Paper Space Viewport	551
Setting the Viewport Scale	553
Copying the Layouts	555
Adjusting a Viewport's Contents	557
Aligning Viewports	564
Aligning Viewports for LT	566
Locking and Turning Viewports Off	566
If You Would Like More Practice	569
Are You Experienced?	570

CHAPTER 15 Printing an AutoCAD Drawing 571

Using the Plot Dialog Box 572

 Printer/Plotter. 575

 Paper Size and Number of Copies 575

 Plot Area 575

 Plot Scale 580

 Plot Offset and Plot Options 581

 The Expanded Plot Dialog Box 583

Printing a Drawing 584

 Determining Lineweights for a Drawing. 584

 Setting Other Properties of Layers 588

 Setting Up the Other Parameters for the Print 588

 Previewing a Print 589

Printing a Drawing Using Layouts. 591

 Printing a Drawing with Multiple Viewports. 593

 Publishing Multiple Layouts 595

A Few Words About Plot Styles 597

 Introducing Plot-Style Table Files. 597

Are You Experienced? 606

CHAPTER 16 Creating 3D Geometry 607

Modeling in 3D 608

 Setting Up a 3D Workspace. 608

 Making the Walls 613

 Creating the Door and Window Block-Outs 616

 Cutting the Openings 621

 Creating the Floor, Steps, and Thresholds 622

 Completing the Doors and Windows. 625

 Building the Balcony 633

 Putting a Roof on the Cabin 634

 Using the Orbit Tools 637

Getting Further Directions in 3D 639

 Using Other Solids Modeling Tools 639

 Using Surface-Modeling Tools. 641

Are You Experienced? 642

CHAPTER 17	Materials and Rendering	643
	Creating Cameras to Reproduce Views	644
	Creating the Cameras	644
	Creating a Lighting Scheme	648
	Creating a Light Source	648
	Enabling Shadows.	651
	The First Render.	652
	Controlling the Background of the Rendering	654
	Adding Materials	656
	Rendering to a File	661
	Are You Experienced?	664
	<i>Glossary</i>	665
	<i>Index</i>	679