

AutoCAD 2000: A Problem Solving Approach
Chapter 6: Basic Dimensioning
and Changing Dimension
Settings

Objectives and Syllabus
(Time: 3 Hours)

Objectives

After studying this chapter you should be able to:

- *Understand the need for dimensioning in drawings.*
- *Understand the fundamental dimensioning terms.*
- *Select dimensioning commands in AutoCAD.*
- *Understand associative dimensioning.*
- *Create linear, aligned, rotated, baseline, and continue dimensions.*
- *Create angular, radial, diameter, and ordinate dimensions.*
- *Use the **QDIM** command.*
- *Use the **QLEADER** command to attach annotation to an object.*
- *Change dimension settings.*

Syllabus

Need For Dimensioning		6-1
Dimensioning in AutoCAD	6-2	
Fundamental Dimensioning Terms	6-2	
Dimension Line		6-2
Dimension Text		6-3
Arrowheads		6-3
Extension Lines		6-4
Leader		6-4
Center Mark & Centerlines	6-4	
Alternate Units		6-5
Tolerances		6-5
Limits		6-5
Associative Dimensions		6-6
Updating Associative Dimensions	6-6	
Definition Points	6-7	
Selecting Dimensioning Commands	6-8	
Using the Toolbar & the Dimension Menu	6-8	
Using the Command Line	6-8	
Quick Dimensioning*		6-10
Linear Dimensioning		6-11
DIMLINEAR Options		6-12
Example 1		6-13
Aligned Dimensioning		6-14
Exercise 1		6-15
Rotated Dimensioning		6-16
Baseline Dimensioning		6-16
Continue Dimensioning		6-17
Exercise 2		6-18
Angular Dimensioning		6-19
Dimensioning the angle between two Non-parallel lines	6-19	
Dimensioning the angle of an Arc	6-20	
Angular Dimensioning of circles		6-20
Angular Dimensioning based on three points	6-21	
Exercise 3		6-22
Diameter Dimensioning		6-22

Radius Dimensioning		6-23
Generating Center marks & Center lines	6-24	
Exercise 4		6-25
Ordinate Dimensioning		6-25
Exercise 5		6-27
Drawing Leader		6-27
QLEADER Command*		6-27
Exercise 6		6-31
Using the LEADER Command		6-31
Using Leader with the DIM Command	6-32	
Self Evaluation Test		6-33
Review Questions	6-33	
Exercises	6-36	
Problem Solving Exercises	6-41	
Project Exercises 1-3		6-42
Answers to Self Evaluation Test		6-42