

CHAPTER 13 EXERCISES

1. Metric Drawing Setup

Create a template drawing for use in metric drawings to be plotted at a scale of 1 to 1. Begin a *New* drawing and *Start from Scratch*; use the *Metric* default settings. Next, follow the steps listed below.

- A. Set *Units* to *Engineering* and *Precision* to 0.
- B. Set *Limits* for a B-size sheet (11x17). To convert from inches to millimeters multiply by 25.4 to achieve *Limits* of 431.8,279.4, then *Zoom All*.
- C. Set *Grid* and *Grid Snap* to 10.
- D. *Load* the *Center2*, *Hidden2*, and *Phantom2 Linetypes*.
- E. Create the following *Layers* and change their *Color*, *Linetype*, and *Lineweight* as indicated.

OBJECT	<i>continuous</i>	<i>red</i>	<i>0.40mm</i>
CENTER	<i>center</i>	<i>yellow</i>	<i>Default</i>
PHANTOM	<i>phantom</i>	<i>blue</i>	<i>Default</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>	<i>Default</i>

- F. *Save* the drawing as METRIC-B.

2. Mechanical Engineering Drawing Setup Using the Quick Setup Wizard

Create a template for a drawing to be plotted on C-size paper at a scale of 3/4" = 1". Use the *Quick Setup Wizard* to assist with the following setup. (Make sure the new drawing is based on the template ACAD.DWT.)

- A. In the *Units* section select *Decimal*.
- B. In the *Area* section specify 29.3 and 22.7, then select the *Finish* button.
- C. *Zoom All*.
- D. Set *Grid Snap* to .25.
- E. Set *Ltscale* to 1.33.
- F. *Load* the *Center2*, *Hidden2*, and *Phantom2 Linetypes*.
- G. Create the following *Layers* and assign the *Color*, *Linetype*, and *Lineweight* as indicated.

OBJECT	<i>continuous</i>	<i>red</i>	<i>0.016"</i>
CENTER	<i>center</i>	<i>yellow</i>	<i>Default</i>
PHANTOM	<i>phantom</i>	<i>blue</i>	<i>Default</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>	<i>Default</i>

- H. *Save* the drawing as MECH3-4 -C.

3. Architectural Drawing Setup

Create a template for an architectural drawing to be plotted on B-size paper at a scale of 1/4" = 1". Use *Start from Scratch*, with the *English* default settings. Continue using the following setup.

- A. Set the *Units* to *Architectural*.
- B. Set the *Limits* to *72',48'*, then *Zoom All*.
- C. Set *Grid* to *12* and *Grid Snap* to *12*.
- D. Set *Ltscale* to *48*.
- E. *Load* the *Center2*, *Hidden2*, and *Phantom2 Linetypes*.
- F. Create the following *Layers* and assign the *Color*, *Linetype*, and *Lineweight* as indicated.

OBJECT	<i>continuous</i>	<i>red</i>	<i>0.016"</i>
CENTER	<i>center</i>	<i>yellow</i>	<i>Default</i>
PHANTOM	<i>phantom</i>	<i>blue</i>	<i>Default</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>	<i>Default</i>

- G. *Save* the drawing as **ARCH1-4-B**.

4. Civil Engineering Drawing Setup Using the *Advanced Drawing Setup Wizard*

Create a template drawing using the *Advanced Drawing Setup Wizard*. The template is for a 1"=20' drawing using feet and decimal feet on an engineering D-size sheet.

- A. In the *Units* section select *Architectural*.
- B. Accept all the defaults for angular settings by selecting the *Finish* button.
- C. In the *Area* section specify units of *680'* and *440'*, then select *Finish*.
- D. *Zoom All*.
- E. Set *Grid* to *20'* and *Grid Snap* to *1'*.
- F. *Load* the *Center2*, *Hidden2*, and *Phantom2 Linetypes*.
- G. Set *Ltscale* to *240*.
- H. Create the following *Layers* and change their *Color*, *Linetype*, and *Lineweight* as indicated.

OBJECT	<i>continuous</i>	<i>red</i>	<i>0.016"</i>
CENTER	<i>center</i>	<i>yellow</i>	<i>Default</i>
PHANTOM	<i>phantom</i>	<i>blue</i>	<i>Default</i>
HIDDEN	<i>hidden</i>	<i>magenta</i>	<i>Default</i>

- I. *Save* the drawing as **CIVIL20-D**.