AutoCAD and Its Applications **BASICS**

Supplemental Material—Chapter 10

Isometric Text

Isometric text is parallel to and aligns with a corresponding isometric plane. See **Figure 10A-1**. Text added to horizontal and vertical isometric planes has a 30° or -30° oblique angle, depending on the application. Before adding isometric text, establish text styles to preset the necessary oblique angles. Create a text style named Isometric 30, for example, and enter 30 in the **Oblique Angle:** text box of the **Text Style** dialog box. Create another text style named Isometric -30, and enter -30 in the **Oblique Angle:** text box.

You can draw isometric text using the **MTEXT** or **TEXT** command. You must rotate the text 30°, -30° (330°), 90°, -90° (270°), 150°, or 210°, depending on the drawing application and the isometric plane that is parallel to the text. When creating mtext, pick the first corner of the text boundary, and then use the **Rotation** option to specify the angle of the text boundary. Pick the second corner and begin typing. When creating single-line text, set the rotation angle at the Specify rotation angle of text <0>: prompt. Rotate existing text using an editing command. **Figure 10A-2** shows examples of oblique angles and text rotation necessary to create isometric text.

Figure 10A-1.

An example of an isometric assembly drawing with isometric text.



Figure 10A-2.

Use a text style with a 30° or -30° obliquing angle, and rotate the text object to achieve the correct isometric text.



AutoCAD does not actually create isometric text objects. The **MTEXT** and **TEXT** commands do not use isometric text editors or text boundaries, even if you set the isometric snap mode. See **Figure 10A-3**. Therefore, you must be creative and use available text settings to draw effective isometric text. You may find that the **TEXT** command is often more useful than the **MTEXT** command, even when you are adding multiple lines of text, because you can control individual lines of text without tedious paragraph formatting.

NOTE

When adding text to a nonisometric surface, you must calculate an oblique angle other than the 30° or –30° appropriate for text on a horizontal or vertical isometric plane. See **Figure 10A-4**.

Figure 10A-3.

Text commands use a nonisometric format. This often makes it difficult to create and locate isometric text accurately.



Figure 10A-4.

Constructing text on a nonisometric plane. Remember that text is always parallel to and aligned with the surface.



Activity 10A-1

- 1. Start a new drawing from scratch or use a template of your choice. Save the drawing as ACT10A-1.
- 2. Create a text style named ISOMETRIC 30 that uses the Arial font and 30° oblique angle. Create another text style named ISOMETRIC –30 that uses the Arial font and –30° oblique angle. Create another text style named ISOMETRIC –11 that uses the Arial font and –11° oblique angle.
- 3. Draw the $2 \times 2 \times 2$ cubes shown in **Figure 10A-2**. Add the text shown in **Figure 10A-2** using the **TEXT** command and a .1" text height.
- 4. Draw the 1 × 2 × 2 wedge shown in **Figure 10A-4**. Add the text shown in **Figure 10A-4** using the **TEXT** command and a .1" text height. Do not dimension the drawing.
- 5. Resave and close the file.