CHAPTER 23 EXERCISES

1. Base Plates

Draw the steel Base Plate A as shown in Figure CE23-1. Copy the plate so that you have two identical figures. Using the Stretch mode of Grips, resize the holes and width of the plate as shown on Base Plate B. Label each plate. SaveAs CE23EX1.

2. Concrete Columns

Draw the Column A section as shown in Figure CE23-2. The rebar should be 1½” from the outside of the column. Copy the column and use Grips to modify it to attain the new dimensions shown in Column B. SaveAs CE22EX2.

3. Holding Tanks

Complete the drawing of Tank A in Figure CE23-3. SaveAs TANK. Use the Stretch mode of Grips to modify the dimensions of the tank to those of Tank B. SaveAs TANKB.
4. **Azimuths**

Draw a north arrow and crosshairs 5 units long as shown in Figure CE23-4. Change the **Units** of the drawing to use north as the angle 0 and measure angles clockwise.

![Figure CE23-4](image)

Draw a **Line** 4 units long at 45° (Fig. CE23-5). Use the **Rotate** with **Copy** option of the **Grips** to complete the drawing shown in Figure CE23-5. **SaveAs** **CE23EX4**.

![Figure CE23-5](image)