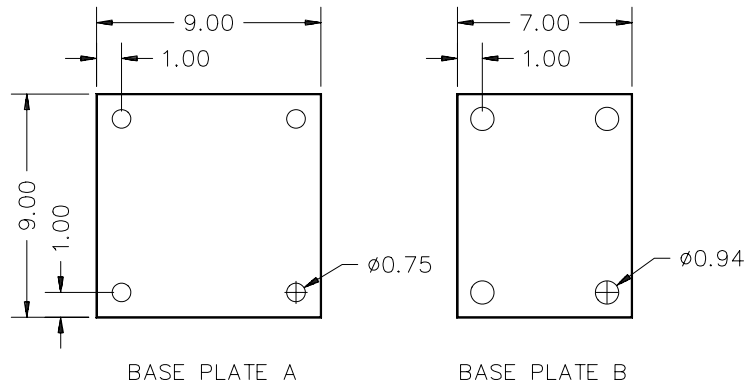


CHAPTER 23 EXERCISES

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.

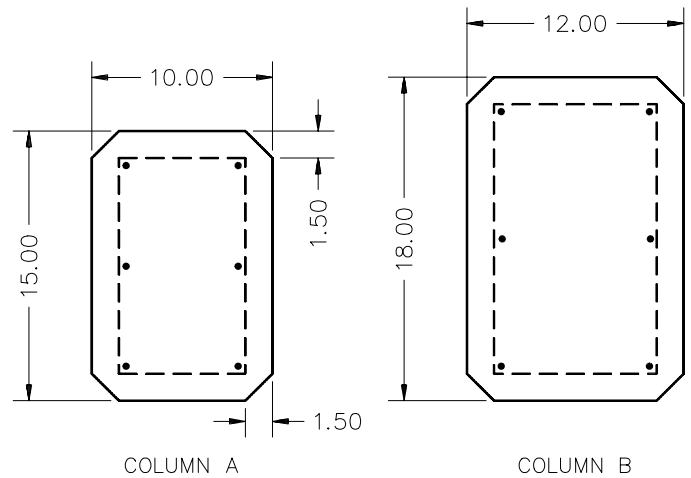
Figure CE23-1



2. Concrete Columns

Draw the Column A section as shown in Figure CE23-2. The rebar should be $1\frac{1}{2}$ " 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.

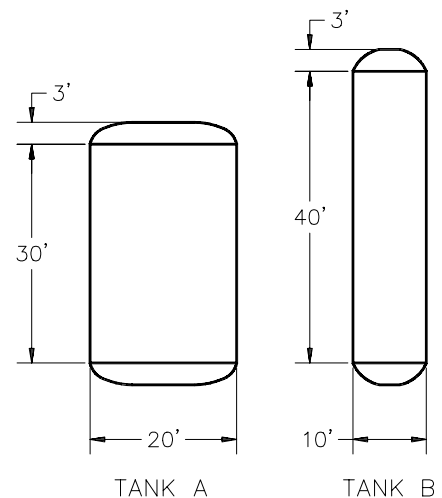
Figure CE23-2



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.

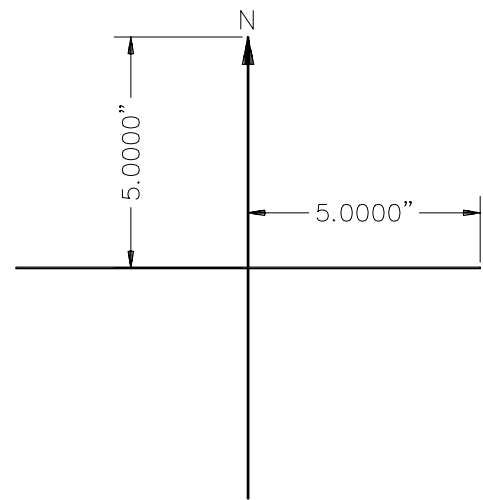
Figure CE23-3



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



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

