## CHAPTER 8 EXERCISES

## 1. Logic Gates

Draw the three logic gates shown in Figure CE8-1. Assume symmetry about a central horizontal axis. Start by drawing the straight Line segments. Then use the Start, End, Radius option of the Arc command to complete the curved portions. SaveAs LOGIC.

Figure CE8-1


## 2. Utility Vault

Complete the drawing of the utility vault in Figure CE8-2. You will need to change your Units to Engineer's and the Limits to $\mathbf{2 0}^{\prime}, \mathbf{1 0}^{\prime}$. You may need to draw some construction lines in order to position the circles correctly. Erase the construction lines when you finish. The access manholes are centered vertically on the vault. SaveAs VAULT.

Figure CE8-2


## 3. Open Traverse

Set your Units to Engineer's linear measurements and Surveyor's angular measurements. Set your Limits to $325^{\prime}, \mathbf{1 2 5}$ '. Draw the open traverse in Figure CE8-3 using a Pline with Thickness of 4". SaveAs TRAVERSE.

Figure CE8-3

4. Steel Connection Detail Figure CE8-4

Complete the drawing of the column and base plate in Figure CE8-4. Estimate all dimensions which are not given. You do not need to include any dimensions or text. SaveAs CONNDET.


