

Professional Certification Review Manual
APPRENTICE DRAFTER
ARCHITECTURAL

Competency 11
HVAC-Plumbing-Electrical Plans
and Related Terminology

ITEMS TO REVIEW for COMPETENCY 11:

- HVAC Equipment access
- HVAC support
 - Ground
 - Suspended
- Duct placement regulations
- Use of multiple compressors
- Different types of heating systems
- HVAC symbols
- Residential piping versus industrial piping
- Plumbing Isometrics
- Plumbing abbreviations
- Plumbing symbols
- Electrical codes
- Outlet requirements
- Electrical symbols

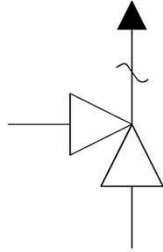
TERMS TO BE DEFINED OR IDENTIFIED for COMPETENCY 11:

- UL
- Compressor
- Expansion valve
- Split system
- Return
- Supply
- Turning vane
- Soil pipe
- Isometric
- BOP
- Valve
- 'AMP'
- Conduit
- NEC

REVIEW QUESTIONS:

1. For energy conservation, a water heater should be located:
 - a. In the garage
 - b. In the basement
 - c. In an insulated space
 - d. Near the kitchen
2. A cleanout has a removable plug.
 - a. T
 - b. F
3. What kind of pipe carries wastewater and refuse?

4. Identify the symbol.



5. The thermostat should be located near a window.

- a. T
- b. F

6. A zonal heating system heats the entire house at one time.

- a. T
- b. F

7. What is a heat pump?

8. One principle part of a refrigeration system is an expansion valve?

- a. T
- b. F

9. Pre-formed ducts are approved and labeled by:

- a. IRC
- b. DOT
- c. UL
- d. RAC

10. Temperature limit controls are required for:

- a. Equipment connected to duct systems
- b. Items connected to compressors
- c. Heat pumps
- d. None of the above

11. A baseboard is a type of zonal heater.

- a. T
- b. F

12. Another name for a toilet is:

- a. Bide
- b. Urinal
- c. Water closet
- d. Sink

13. Identify the symbol

