

## **Carpentry & Building Construction**

### **Chapter 16 Wall Framing & Sheathing**

#### **Section 16.1 Assessment Answers**

1. 16" on center
2. The header supports structural loads above the opening and transfers them to framing on each side of the opening.
3. Cripple studs reinforce the door and window openings. All framing members should fit against each other tightly in order to help reduce shifts in framing that can result in cracked wall surfaces as well as poorly-fitting doors and windows.
4. The most common sheathings used in residential construction are square-edged 4×8 panels made of plywood or oriented-strand board (OSB).
5. Reports will vary.

#### **Section 16.2 Assessment Answers**

1. To check a building for square.
2. Plate layout is the process of marking the location of studs, doors, and windows on the top and bottom plates.
3. A by-wall runs from the outside edge of the subfloor to the outside edge of the opposite end of the subfloor. Butt-walls fit between the by-walls.
4. A rough opening is the space into which a door or window will fit. It allows space for leveling and plumbing the frame.
5. Reports will vary.

#### **Section 16.3 Assessment Answers**

1. A story pole serves as standard reference for location and size of window headers, sills, door headers, and heights of various openings above subfloor.
2. The header may settle, causing cracks in the wall finish and making the door or window fit improperly.
3. The length of the opening it must span determines the depth of a header.
4. Two 16d nails are used.
5. ½"

#### **Section 16.4 Assessment Answers**

1. A shear wall is installed in order to make the structure of a house more rigid. It is often used in areas where earthquakes and severe storms are common.
2. A plumbing wall, blocking, or a sound wall may be required in a bathroom.
3. It sometimes contains lighting. More commonly it is used where upper cabinets do not extend to the ceiling, as shown.
4. Fireblocking is meant to slow the passage of flames through wall cavities. It also strengthens the walls.
5. End-nailing is stronger than toenailing.