

# **Carpentry & Building Construction**

## **Chapter 15 Floor Framing**

### **Section 15.1 Assessment Answers**

1. A girder is a large principal horizontal member used to support the floor joists. The ends of a girder are supported by the foundation walls.
2. Lally columns are steel posts. They are often preferred in residential construction because they are strong, easy to handle, and take less space than solid wood posts.
3. Built-up wood girders are built on-site and consist of three or four pieces of solid lumber nailed face to face.
4. A wood bearing plate must be attached to the top of the beam.
5.  $56' \div 8' = 7$  posts;  $7$  posts  $- 1$  post =  $6$  posts. Therefore,  $6$  posts will be needed.

### **Section 15.2 Assessment Answers**

1. The sill plate is the lowest framing member of the wood frame and provides a smooth bearing surface for the floor joists.
2. A 5/8" spade bit.
3. The crown is the outermost curve of the bow. A crowned joist will tend to straighten out when subfloor and normal floor loads are placed on it.
4. A web stiffener will improve the load-bearing ability of the I-joist. It can also provide additional bearing surface for lumber or I-joist blocking.
5. 111 joists will be needed.

### **Section 15.3 Assessment Answers**

1. Immediately after the adhesive has been applied in a small area.
2. Common nails, ring-shank or screw-shank nails, screws, glue-nailing.
3. The underlayment is an extra layer of material that is installed over the subfloor. It covers any minor construction damage to the subfloor and provides a smooth substrate for finish flooring such as sheet vinyl.
4. A 10d box nail can be used as a spacer.
5. Reports will vary.