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## WOODWORKING AND CARPENTRY

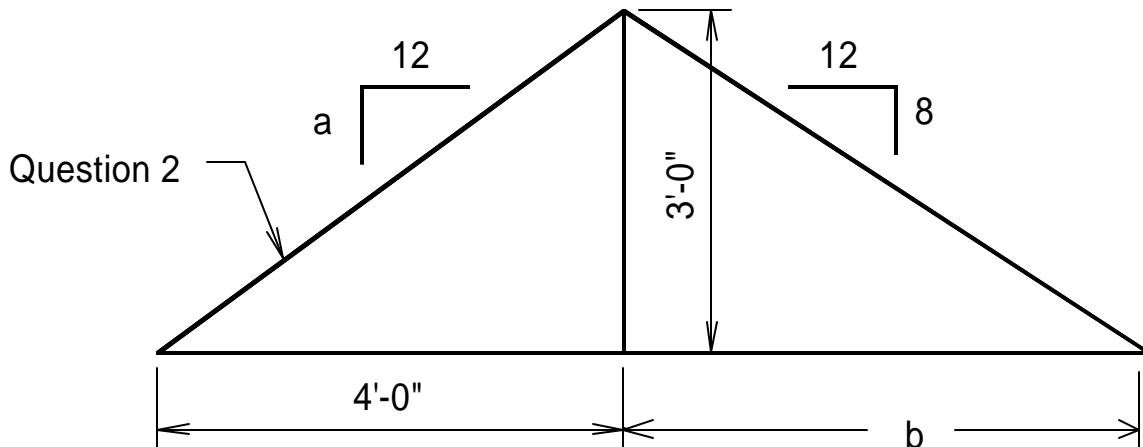
### Materials Needed:

Rafter Framing Square  
2x4x8 Board

### Directions :

1. Secure materials and find a workstation.
2. Examine the rafter diagram

### Rafter Layout Diagram



1. Calculate letters a. and b. on the diagram.

a:

b:

2. Lay out the angles and mark where to cut on the board represented by a dotted line on the diagram. Assume the roof has NO overhang.

### Board Feet Problem

3. Examine the board labeled B. Use the tape measure provided to determine the board feet for this board.

Answer \_\_\_\_\_

### Lumber Tool ID

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

### Complete questions 9-13 using the Midwest Plan No. 72364

9. Identify and circle the letter of the board that is cut correctly for the calf barn's knee brace.

A.                      B.                      C.                      D.

10. What is the preferred material to use for the 2"x 6" wall girts?

\_\_\_\_\_

11. What size PVC pipe should be used for the drain if it is on a 1% slope?

\_\_\_\_\_"

12. Why should all plywood edges in the manger be painted?

\_\_\_\_\_

13. What are the dimensions of the two trackboards above the two sliding doors?

\_\_\_\_\_ "x \_\_\_\_\_ "x \_\_\_\_\_'      &      \_\_\_\_\_ "x \_\_\_\_\_ "x \_\_\_\_\_'

## Woodworking and Carpentry Scoring

	<u>Possible</u>	<u>Earned</u>
<b>Problem 1</b>	<b>6</b>	_____
<b>Correct Angle 1 (5 pts)</b>	<b>5</b>	_____
<b>Correct Angle 2 (5 pts)</b>	<b>5</b>	_____
<b>Correct Length (5 pts)</b>	<b>5</b>	_____
<b>Board Feet Problem</b>	<b>5</b>	_____
<b>Lumber Tool Id</b>	<b>10</b>	_____
<b>Midwest Plan (2pts each)</b>	<b>10</b>	_____
<b>Safety (5 pts)</b>	<b>4</b>	_____
<b>Total</b>	<b>(50 pts)</b>	_____