



ALBERTA FOREST PRODUCTS ASSOCIATION
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A.F.P.A. FALL 2020 & SPRING 2021 GRADE EXAM

Name: _____ Date: _____

Company: _____ Location: _____

Mark the answer you choose with an **[X]**. ONLY ONE ANSWER PER QUESTION PLEASE!

1. The portion of a branch or limb cut through by a saw, results in what type of defect?

☐ Checks ☐ Splits ☐ Knots ☐ Warp

2. What piece of information is **NOT** required to be on a Grade Stamp:

☐ CLSAB ☐ NLGA ☐ Species ☐ Grade

3. An indication that a piece of lumber contains **SLOPE of GRAIN** is?

☐ Twist ☐ Cup ☐ Shake ☐ Decay

4. Which Species is being attacked by "Mountain Pine Beetle"?

☐ Tamarack ☐ Lodgepole Pine ☐ White Spruce ☐ Douglas Fir

5. Which of the following species is a Hardwood?

☐ Black Spruce ☐ Douglas Fir ☐ Tamarack ☐ Aspen

6-9. Match the category name with the correct NLGA paragraph number. (e.g. a)

- | | | |
|------------------------------|---------------|-------|
| a) Economy | 6. Para. 122 | _____ |
| b) Light Framing | | |
| c) MSR | 7. Para. 121 | _____ |
| d) Structural Joist & Planks | | |
| e) Stud | 8. Para. 124 | _____ |
| f) #3 | 9. Para. 122e | _____ |

Mark the following **DEFECTS** under the correct **CLASSIFICATION**:

| | Defect | Natural | Manufacturing | Seasoning |
|-----|--------|---------|---------------|-----------|
| 10. | Skip | [] | [] | [] |
| 11. | Crook | [] | [] | [] |
| 12. | Checks | [] | [] | [] |
| 13. | Shake | [] | [] | [] |

Match the following **MANUFACTURING DEFECTS** to the correct **DEPTH CLASSIFICATION**:

| | DEFECT | 1/64" | 1/32" | 1/16" | 1/8" | Over 1/8" |
|-----|-----------------------------|-------|-------|-------|------|-----------|
| 14. | Very Heavy Offset | [] | [] | [] | [] | [] |
| 15. | Light Torn Grain | [] | [] | [] | [] | [] |
| 16. | Very Light Skip | [] | [] | [] | [] | [] |
| 17. | Medium Wavy Dressing | [] | [] | [] | [] | [] |

Mark the correct dressed **THICKNESS** for the following:

| | | | | | |
|-----|-----------------------|------------|------------|-------------|-------------|
| 18. | 4 x 4 S-GRN HT | [] 3 1/2" | [] 3 3/4" | [] 3 9/16" | [] 3 5/8" |
| 19. | 1 x 6 S-DRY | [] 1/2" | [] 5/8" | [] 3/4" | [] 25/32" |
| 20. | 3 x 12 KD-HT | [] 2 1/4" | [] 2 1/2" | [] 3" | [] 2 3/4" |
| 21. | 2 x 12 S-GRN | [] 2" | [] 1 3/4" | [] 1 1/2" | [] 1 9/16" |

| Mark the correct dressed WIDTH for the following: | | | | | |
|--|-----------------------|-------------|-------------|--------------|-------------|
| 22. | 2 x 12 S-GRN | [] 11 1/4" | [] 11 1/2" | [] 11 9/16" | [] 11 5/8" |
| 23. | 2 x 6 S-GRN HT | [] 5 1/4" | [] 5 1/2" | [] 5 9/16" | [] 5 5/8" |
| 24. | 3 x 8 S-DRY HT | [] 7 1/2 | [] 7 9/16 | [] 7 5/8" | [] 7 1/4" |
| 25. | 4 x 4 KD-HT | [] 3 1/2" | [] 3 3/4" | [] 3 9/16" | [] 4" |

| Mark the Highest grade of Par.121 Stud that allows the following for a 2 x 4 - 104 5/8" long: | | | |
|--|---|------|---------|
| | DEFECT | STUD | ECONOMY |
| 26. | Wane 1/2 thickness on the end | [] | [] |
| 27. | White Speck 100% | [] | [] |
| 28. | Decay 1/2 the cross section | [] | [] |
| 29. | Skip 1/16" on one edge full length | [] | [] |
| 30. | 1 in 4 Slope of Grain | [] | [] |
| 31. | Split 1/3 the length | [] | [] |

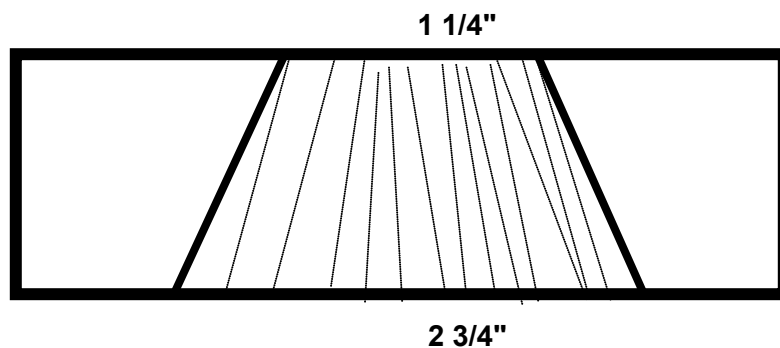
| Mark the HIGHEST grade of Par. 122 Light Framing that allows the following for a 2 x 4 - 16 feet long: | | | | | |
|---|--|--------------|----------|---------|---------|
| | DEFECT | CONSTRUCTION | STANDARD | UTILITY | ECONOMY |
| 32. | 1 in 6 Slope of Grain | [] | [] | [] | [] |
| 33. | Three Face Shake | [] | [] | [] | [] |
| 34. | Full length wane, 3/4 thickness | [] | [] | [] | [] |
| 35. | Decay 1/3 the cross section | [] | [] | [] | [] |
| 36. | Knot 2" on the edge of face | [] | [] | [] | [] |
| 37. | Split 1½ X Width | [] | [] | [] | [] |
| 38. | Wane completely across the wide face on the end | [] | [] | [] | [] |
| 39. | Heavy warp | [] | [] | [] | [] |
| 40. | Surface shake 2' | [] | [] | [] | [] |

Mark the **HIGHEST** grade of **Par. 124 Structural Light Framing and Joist & Planks** that allows the following in a **2 x 8-10** feet long:

| | DEFECT | SEL STR | #1 | #2 | #3 | NONE |
|-----|--|---------|-----|-----|-----|------|
| 41. | Wane 1/4 T x 1/4 W full length | [] | [] | [] | [] | [] |
| 42. | 100% Blue Stain | [] | [] | [] | [] | [] |
| 43. | Surface Shake full length | [] | [] | [] | [] | [] |
| 44. | Slope of Grain 1 in 10 | [] | [] | [] | [] | [] |
| 45. | Shake through the edge (3 face) | [] | [] | [] | [] | [] |
| 46. | ½ Medium Warp | [] | [] | [] | [] | [] |
| 47. | Skip 1/16 inch deep full length | [] | [] | [] | [] | [] |
| 48. | Hit & Miss Skip | [] | [] | [] | [] | [] |
| 49. | Wane 1/3 T x 1/3 W full length | [] | [] | [] | [] | [] |
| 50. | Wane 3/4T x 3/4W Maximum Equiv. | [] | [] | [] | [] | [] |
| 51. | Through Shake 2 feet long | [] | [] | [] | [] | [] |
| 52. | Edge Knot 3-1/2" | [] | [] | [] | [] | [] |
| 53. | Split 12 inches of the piece | [] | [] | [] | [] | [] |
| 54. | Spike Knot 55% displacement | [] | [] | [] | [] | [] |
| 55. | Decay | [] | [] | [] | [] | [] |
| 56. | 100% Heart Stain | [] | [] | [] | [] | [] |

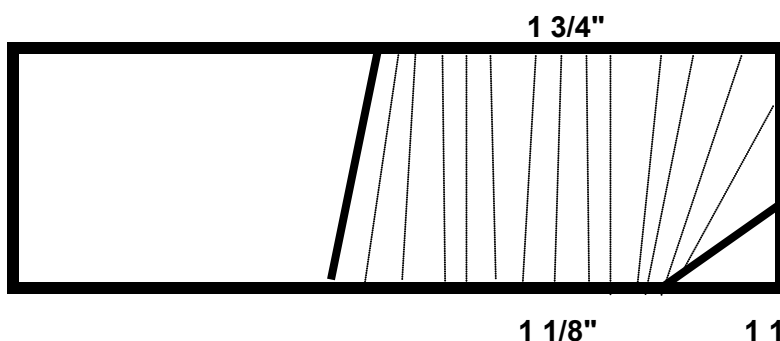
List the knot sizes for the following **KD-HT 2 x 4's**

57. List the knot size:



SIZE

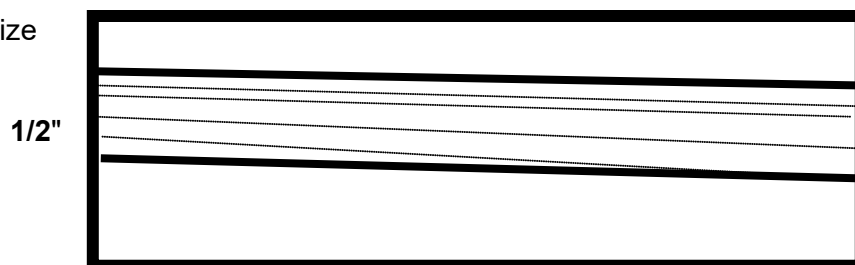
58. List the knot size:



1"

SIZE

59. List the knot size

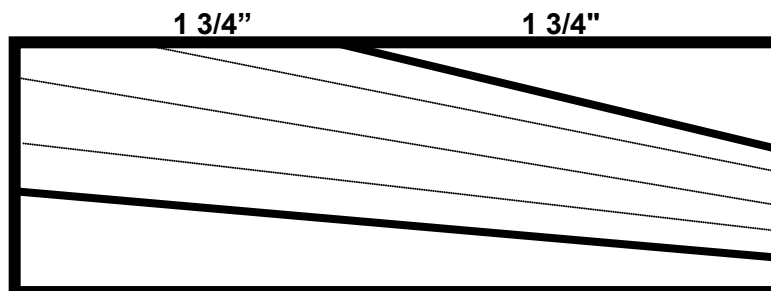


1/2"

3/8"

SIZE

60. List the knot size
1"



1/2"

3/4" SIZE