

FFA 2017 Group Problem Answers (450 points)

All questions worth 1 point unless otherwise noted.

Total points possible = 113, so multiply raw score times 4 for final score (2 points bonus...)

internal note Volumes: 5% range from correct amount

internal note Distances: total= $\pm 3'$ around correct, then ranges 5', 5'

internal note Azimuths: total= $\pm 2^\circ$ around correct, then ranges 2° each

- A
 - 1. Ash (2pt)
 - 2. 24" (23.8)
 - 3. 1.0 logs (21')
 - 4. 231: 196206 (1pt), 207-218 (2pts), 219-242 (3pts), 243-254 (2pts), 255-265 (1pt)
 - 5. Beatles, borers or EAB (Emerald Ash Borer) (2pt)
- B
 - 6. Sugar Maple (2pt)
 - 7. 28" (28.1)
 - 8. 1.5 logs (26')
 - 9. 466: 396-418 (1pt), 419-441 (2pts), 442-489 (3pts), 490-512 (2pts), 513-536 (1pt)
- C
 - 10. Hickory (2pt)
 - 11. 21" (21.3)
 - 12. 4.0 logs (64')
 - 13. 436 370-391 (1pt), 392-413 (2pts), 414-458 (3pts), 459-479 (2pts), 480-501 (1pt)
- D
 - 14. Northern Red Oak (2pt)
 - 15. 27" (26.7)
 - 16. 4.0 logs (64')
 - 17. 877: 745-788 (1pt), 789-834 (2pts), 833-920 (3pts), 921-964 (2pts), 965-1008 (1pt)
- E
 - 18. Yellow Poplar (2pt)
 - 19. 19" (19.0)
 - 20. 3.0 logs (50')
 - 21. 278: 236-249 (1pt), 250-263 (2pts), 264-292 (3pts), 293-306 (2pts), 307-319 (1pt)
- F
 - 22. 154degrees: 148-149 (1pt), 150-151 (2pts), 152-156 (3pts), 157-158 (2pts), 159-160 (1pt)
 - 23. 70 ft : 57-61 (1pt), 62-66 (2pts), 67-73 (3pts), 74-78 (2pts), 79-83 (1pt)
- G
 - 24. 26degrees: 20-21 (1pt), 22-23 (2pts), 24-28 (3pts), 29-30 (2pts), 31-32 (1pt)
 - 25. 62 ft : 49-53 (1pt), 54-58 (2pts), 59-65 (3pts), 66-70 (2pts), 71-75 (1pt)
- H
 - 26. White Oak (2pt)
 - 27. 26" (25.9)
 - 28. 3.0 logs (52')
 - 29. 663: 563-596 (1pt), 597-628 (2pts), 629-696 (3pts), 697-729 (2pts), 730-762 (1pt)

- I 30. 1:24,000
31. 10 ft
32. NW $\frac{1}{4}$
33. 968 ft
34. Section 9
- J 35. prism or 10 factor prism
36. 110 BA or sq. ft.:100 (1pt), 110 (2pts), 120 (1pt)
- K 37. beech (2pt)
38. shade tolerant
- L 39. Chestnut Oak (2pt)
40. 20" (20.4)
41. 3 logs (54')
42. 321: 273-288 (1pt), 289-304 (2pts), 305-337 (3pts), 338-353 (2pts), 354-369 (1pt)
- M 43. Rott or butt rot (2pt)
- N 44. Black Oak (2pt)
45. 28" (27.9)
46. 2.5 logs (45')
47. 700: 595-629 (1pt), 630-664 (2pts), 665-735 (3pts), 736-770 (2pts), 771-805 (1pt)
- O 48. 47degrees: 41-42(1pt), 43-44(2pts), 45-49 (3pts), 50-51 (2pts), 52-53 (1pt)
49. 124ft : 111-115 (1pt), 116-120 (2pts), 121-127 (3pts), 128-132 (2pts), 133-137 (1pt)
- P 50. 82degrees: 76-77 (1pt), 78-79 (2pts), 80-84 (3pts), 85-86 (2pts), 87-88 (1pt)
51. 102ft: 89-93 (1pt), 94-98 (2pts), 99-105 (3pts), 106-110 (2pts), 111-115 (1pt)
- Q 52. 37degrees: 31-32(1pt), 33-34 (2pts), 35-39 (3pts), 40-41 (2pts), 42-43(1pt)
53. 80ft: 67-71 (1pt), 72-76 (2pts), 77-83 (3pts), 84-88 (2pts), 89-93 (1pt)
- R. 54. Sycamore (2pt)
- Business Problem
55. \$11,250
56. \$3,750
57. \$1,000
58. \$3,200
59. \$30,000
60. \$10,800 (5pts)