

FFA 2016 Group Problem Answers

All questions worth 1 point unless otherwise noted.

Total points possible = 100, so multiply raw score times 4.5 for final score

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

- 1
 - a. White Oak (2pt)
 - b. 26" (25.7)
 - c. 1.5 logs (27')
 - d. 386: 328-347 (1pt), 348-365 (2pts), 366-405 (3pts), 406-424 (2pts), 425-444 (1pt)
- 2
 - a. Yellow Poplar or Tuliptree (2pt)
 - b. 20" (20.2)
 - c. 4 logs (66')
 - d. 374: 318-336 (1pt), 337-355 (2pts), 356-392 (3pts), 393-411 (2pts), 412-430 (1pt)
- 3
 - a. Red Oak (2pt)
 - b. 18" (18.4)
 - c. 2.5 logs (52')
 - d. 206: 175-185 (1pt), 186-195 (2pts), 196-216 (3pts), 217-226 (2pts), 227-237 (1pt)
- 4
 - a. 282degrees: 276-277 (1pt), 278-279 (2pts), 280-284 (3pts), 285-286 (2pts), 287-288 (1pt)
 - b. 69ft : 56-60 (1pt), 61-65 (2pts), 66-72 (3pts), 73-77 (2pts), 78-82 (1pt)
- 5
 - a. prism or 10 factor prism (2pts)
 - b. 120 BA or sq. ft. (2pts)
- 6
 - a. beech (2pt)
 - b. shade tolerant
- 7
 - a. Hickory (2pt)
 - b. 20" (20.4)
 - c. 2.5 logs (46')
 - d. 282: 239-253 (1pt), 254-267 (2pts), 268-296 (3pts), 297-310 (2pts), 311-324 (1pt)
- 8
 - a. Black Oak (2pt)
 - b. 30" (30.2)
 - c. 2 logs (38')
 - d. 703: 597-632 (1pt), 633-667 (2pts), 668-738 (3pts), 739-773 (2pts), 774-808 (1pt)
- 9
 - a. Ash (2pt)
 - b. 18" (18.2)

- c. 2 logs (55')
- d. 179: 152-161 (1pt), 162-170 (2pts), 171-187 (3pts), 188-196 (2pts), 197-205 (1pt)
- e. Beetles, borers or EAB (Emerald Ash Borer) (2pt)
- 10
 - a. White Oak (2pt)
 - b. Rott or butt rot
- 11
 - a. 62degrees: 56-57(1pt), 58-59(2pts), 60-64 (3pts), 65-66 (2pts), 67-68 (1pt)
 - b. 117ft : 104-108 (1pt), 109-113 (2pts), 114-120 (3pts), 121-125 (2pts), 126-130 (1pt)
- 12
 - a. 108/109degrees: 102-103 (1pt), 104-105 (2pts), 106-111 (3pts), 112-113 (2pts), 114-115 (1pt)
 - b. 67ft: 54-58 (1pt), 59-63 (2pts), 64-70 (3pts), 71-75 (2pts), 76-80 (1pt)
- 13.
 - a. clinometer
 - b. measure slope or heights (not same as below)
 - c. measure slope or heights (not same as above)
 - d. 19%
- 14
 - a. Branson
 - b. 1:24,000
 - c. 20 feet
- 15
 - a. drip torch
 - b. leaf rake
 - c. pulaski
- 16 Business Problem
 - 50. \$11,250
 - 51. \$3,750
 - 52. \$1,000
 - 53. \$3,200
 - 54. \$30,000
 - 55. \$10,800