

Final Exam - Arkansas State Univ.

1. Calculate the smallest limb diameter on a persimmon tree that will support a 10 pound possum.
2. Which of the following cars will rust out the quickest when placed on blocks in your front yard? 66 Ford Fairlane, 69 Chevrolet Chevelle, 64 Pontiac GTO
3. If your uncle builds a still that operates at a capacity of 20 gallons of shine per hour, how many car radiators are necessary to condense the product?
4. A pulpwood cutter has a chain saw that operates at 2700 rpm. The density of the pine trees in a plot to be harvested is 470 per acre. The plot is 2.3 acres in size. The average tree diameter is 14 inches. How many Budweiser Tallboys will it take to cut all the trees?
5. If every old refrigerator in the state vented a charge of R-12 simultaneously, what would be the % of decrease in the ozone layer?
6. A front porch is constructed of 2x8 pine on 24-inch centers with a field rock foundation. The span is 8 feet and the porch length is 16 feet. The porch floor is 1 inch rough sawn pine. When the porch collapses, how many hound dogs will be killed?
7. A man owns a house and 3.7 acres of land in a hollow with an average slope of 15 degrees. The man has 5 children. How many of the children can each place a mobile home on the man's land?
8. A 2-ton pulpwood truck is overloaded and proceeding 900 yards down a steep grade on a secondary road at 45 mph. The brakes fail. Given the average traffic loading of secondary roads, what are the chances that it will strike a vehicle that has a muffler?
9. A coal mine operates a NFPA Class 1, Division 2, Hazardous Area. The mine employs 120 miners per shift. A gas warning is issued at the beginning of 3rd shift. How many cartons of unfiltered Camels will be smoked during the shift?
10. At a reduction in gene pool variability rate of 7.5% per generation, how long will it take a town, that has been bypassed by the interstate, to breed a country-western singer?