1. Benefits of more uniform ammonia application may include all of the following EXCEPT:
   - a. Increased crop yields.
   - b. Decreased nitrogen expenses.
   - d. Reduced chance of nitrogen leaching.

2. A way that corn growers can reduce the relative unevenness of ammonia application among rows is to:
   - a. Ensure hoses are the same length.
   - b. Loop hoses so liquid ammonia pools in low spots.
   - c. Use aqua ammonia as an additive.
   - d. Inject ammonia less deeply in the soil.

3. Near the economic optimum rate of nitrogen in corn following soybeans, a 10 lb. decrease in the rate of nitrogen applied will most likely result in the following yield response:
   - a. 1-2 bu/A.
   - b. 5-8 bu/A.
   - c. 10-15 bu/A.
   - d. 20-30 bu/A.

4. Ammonia is stored before application in tanks in the form of a:
   - a. Liquid suspension.
   - b. Pressurized gas.
   - c. Liquid.
   - d. Vapor.

5. As compared to corn following soybeans, the recommended rate of nitrogen for corn following corn is usually:
   - a. 25% less.
   - b. 10% less.
   - c. The same.
   - d. More.

6. The return to a grower with 500 corn acres of investing in improved N equipment as compared to a grower with 1000 acres is:
   - a. Less.
   - b. The same.
   - c. More.
   - d. Doubled.

7. The economically optimum rate of nitrogen applied is that rate where:
   - a. The last pound of N is just paid for by the yield increase from that N.
   - b. The last pound of N provides a 2:1 ratio of cost vs. return.
   - c. Corn plants do not show deficiency symptoms.
   - d. The cost curve intersects the y axis.

8. According to the analysis in this module, if a grower applying 140 lb/A N for corn following soybeans using a conventional manifold in 30" spacing switched to a system of uniform application, they could increase yields by:
   - a. Less than 1 bu/A.
   - b. 1-2 bu/A.
   - c. 3-5 bu/A
   - d. 5-8 bu/A.

9. The manifold type showing the greatest amount of row to row variation is the:
   - a. Vertical dam.
   - b. Rotaflow.
   - c. Conventional.
   - d. Ammoniator.

10. Reasons a producer may want to apply anhydrous ammonia in 60-inch spacings vs. 30-inch spacings include all of the following EXCEPT:
    - a. Decreased soil disturbance.
    - b. Reduced horsepower requirements.
    - c. More uniformity of fertilizer application across the field.
    - d. Ability to cover more acres in a day.