Students please affix one of your self adhesive identification labels to this space. Do not obscure other parts of this page with the label. If you do not have a self adhesive identification label, please complete the following information. Write your name as it appears on your badge. **Your Name:** _____ **Participation Number:** [ ][ ][ ] 0 3 [ ][ ][ ] 0 [ ] **Two letter state abbreviation.** → **State code (0301, 0302, …… to 0350)** **Team member number (01, 02, 03, or 04)**	**Students please do not write or mark within this box.** ***Judges, after this skill sheet has been scored and double checked, write the total score for this activity in the blank below.*** **Skill Activity Score:** _____ **Judges Initials:** _____

2010 National Agriculture Mechanics Career Development Event: Integrated Pest Management Industry and Marketing Systems Skill Activity

Situation: You work for a lawn care company and one of your customers owns a large office complex. For aesthetics and cooling, the office parking lot contains 25 turf strips (warm season turf grass), each measuring 40-in. x 72-in. You are to spray these turf strips with Certainty™ (post-emergence systemic) herbicide to control yellow nutsedge. You will be using a SOLO 416 Backpack Battery Sprayer. (This sprayer is considered a hand-held sprayer.) Your spray width will be 20-in and you will walk at a speed of 1.5 mph.

Directions: Complete the following. DO NOT WRITE OR MARK IN OR ON THE REFERENCE MATERIALS. LEGIBABLY write each answer in the space provided. NOTE: Helpful formulas can be found on pages 173 and 176 of the TeeJet Catalog.

Questions:	Answer	Score
1. What is the total turf area (ft^2) to be sprayed? (4 pts.)	_____ ft^2	_____
2. To apply the herbicide solution as directed on the product label (for a hand-held sprayer):		
A. How many gallons of water should you put in the spray tank? (3 pts.)	_____ gal.	_____
B. How many teaspoons of surfactant should you put in the spray tank? (3 pts.)	_____ tsp.	_____
3. What nozzle flow rate (GPM) is needed to achieve the recommended application rate? (4 pts.)	_____ GPM	_____
4. For the TeeJet spray nozzles provided:		
A. Which nozzle is the **best** to use for this spraying job? (Write nozzle number in blank.) (4 pts.)	_____ Nozzle	_____
B. What spraying pressure should be used with the nozzle selected to achieve the recommended application rate? (3 pts.)	_____ PSI	_____
5. What is the SOLO order number for the large drift guard attachment for the Model 416 Backpack Battery Sprayer? (3 pts.)	_____ (order #)	_____
6. Answer the following about the battery used in the SOLO Model 416 Backpack Battery Sprayer:		
A. What is the voltage rating of the battery? (3 pts.)	_____ (name)	_____
B. What is the SOLO order number for the battery? (3 pts.)	_____ (order #)	_____