

**Part II**  
**Similarity Index and Recommended Stocking Rate Calculation**  
**Partial Credit Procedure**

The reason for considering partial credit for Similarity Index and Stocking Rate calculations is to reward contestants for understanding how to do these calculations rather than an all-or-none approach. For example, without partial credit, a contestant only needs to misidentify one plant to lose full credit for calculations.

1. For Similarity Index and Recommended Stocking Rate scores, check the boxes on the score-sheet for correct entries. If entries in these boxes are correct according to the Part II Score Sheet Key, give full credit for the answer(s).
2. If no numbers are entered in the Similarity Index and Stocking Rate boxes, no credit can be given.
3. If numbers are entered in the Similarity and Stocking Rate boxes, but are not correct, use the contestant's **Ecological Site Description & Plant Production Worksheet** to check that calculations have been done correctly. Contestants must turn in this worksheet to receive partial credit.

a. For Similarity Index calculations:

- i. A number for total Allowable Production must be entered in the "Total" box for that column in the worksheet. This total must be entered in Similarity Index Equation.
- ii. The Reference Plant Community Total (provided on the worksheet) must be entered in the Similarity Index Equation.
- iii. A percentage must appear at the end of the equation. See example below.

$$\text{Similarity Index (SI)} = \left( \frac{\underline{500} \text{ Allowable lbs/acre}}{\underline{1000} \text{ RPC production lbs/acre}} \right) * 100 = \underline{50} \%$$

*Transfer this number to Part II Score Sheet*

- iv. If all of these entries appear and the calculated percentage shown on the worksheet matches the entry on the contestant's score sheet, give the contestant the partial credit indicated by the contest committee.

b. For Recommended Stocking Rate calculations:

- i. A number for total Desirable Annual Production must be entered in the "Total" box for that column in the worksheet. This total must be entered in the Recommended Stocking Rate Equation.
- ii. Numbers must appear in all blanks (Useable Forage, ac/auy). See example below.

$$\frac{\text{Desirable Annual Production (lbs/ac)} \underline{2000}}{\text{Recommended Stocking Rate (ac/auy)} \underline{10,000 \text{ lbs/animal unit year}}} \div 4 = \text{Usable Forage} \underline{500} \text{ (lbs/ac)}$$
$$\underline{10,000 \text{ lbs/animal unit year}} \div \underline{500} \text{ Usable Forage (lbs/ac)} = \underline{20} \text{ ac/auy}$$

*Transfer this number to Part II Score Sheet*

- iii. If all these entries appear and the calculated stocking rate shown on the worksheet matches the entry on the contestant's score sheet, give the contestant the partial credit indicated by the contest committee.