

4. Skills, Competencies and Knowledge

This section covers the abilities you developed or things you accomplished as a result of the training and experiences you received through your agricultural education and SAE program. This section provides space for you to list only the **10 best** skills and competencies you gained.

- ! **Special Tip:** Do not write a narrative on a specific skill or competency. Simply state the skill or competency learned and indicate the specific contribution that it made to your success.



Examples:

<u>Skills, Competencies and Knowledge</u>	<u>Contributions to Success</u>
<i>Used hormones to regulate plant growth.</i>	<i>By reducing the time required to reach maturity, I was able to market plants two weeks earlier than in previous years. The number of potted plants sold increased by 10 percent.</i>
<i>I've developed the ability to match fertilizer use with yield goals.</i>	<i>Fertilized corn according to goal and soil test to achieve an average yield per acre of 169 bushels on 111 acres.</i>
<i>Topped and shaped Christmas trees to meet customer demand for high quality consumer products.</i>	<i>Topped and shaped trees sold for \$4 more per tree than unshaped trees.</i>
<i>Developed a plan for managing herd health.</i>	<i>Used insecticide ear tags to control flies and reduce the stress on cows, resulting in more milk for calves and an estimated 10-pound increase in weaning weight per calf.</i>

Dual Participation:

- Members who have qualified to participate in more than one category of National FFA Award or Recognition Activities, e.g. CDEs and Agriscience or Agriscience and Proficiency or stars finalist must notify their state staff within 5 working days after being selected or certified to participate. State staff will contact appropriate program coordinator to determine if accommodations for dual participation can be arranged. Under no circumstances will the accommodation impact the published schedule, overall integrity of the event or other participants' ability to be fairly evaluated. In some cases due to published schedule no accommodations will be made. In these cases the participant will need to choose and where appropriate the state staff may choose to certify a second place team or a replacement member. This policy does not supersede existing event policies that restrict multiple participation.

Process for implementation

- a. The local agriculture teacher notifies state staff of conflict.
- b. State staff notifies appropriate program coordinator.
- c. Program coordinators will contact event superintendents to discuss published event schedules and possible accommodations. National FFA Staff will make final determination after obtaining input from event superintendents.
- d. Program coordinator will communicate decision to state staff in writing with a copy of final decision sent to state staff, event superintendent and participant

5. Efficiency Factors

Efficiency factors measure how well you manage your enterprise compared to accepted industry standards. Efficiency factors are like grades in report cards. They can tell you if your business is doing well and you should continue your current practices. They can also reveal whether you should make some changes.

Efficiency Factor

Efficiency factors are accepted industry measurements that you use to assess the effectiveness of specific aspects your enterprise.

Year


This area is for the calendar year in which you attained the efficiency.

Level Achieved

Efficiency factors are represented by specific numbers. Calculate the efficiency factor and place the number in this area.

Describe how this factor was used to manage this enterprise

What did you learn from each efficiency factor? What changes in management, if any, have you decided to make based on your analysis of this efficiency factor?

 Examples:	Efficiency Factor	Year	Level Achieved	Describe how this factor was used to manage this enterprise
	Pigs born per litter	2004	8.3	This factor was below industry standards, so I culled poor performing sows to improve conception rates. Birth rates increased to 8.7 in 2000 and 9.1 in 2001.
	Inventory turnover	2005	19.7	Industry standards (Robert Morris & Associates) indicate that businesses of this kind have an inventory turnover of about 18-20. Therefore, I have made no changes in inventory management.
	Gross profit percentage 2006		29 percent	Industry standards for this type of enterprise show high profit businesses have gross profit percentages of 42-45 percent. I instituted a program to reduce fixed costs.

In the section that follows are examples of specific formulas needed to calculate efficiency factors. Following these examples will be formulas you may need to calculate efficiency factors.

Efficiency Factors continued on page 40

Efficiency Factors (continued)

Efficiency Factor Formulas

An efficiency factor is a way for you to measure how well your business or enterprise is doing based on accepted standards of production. The formulas in this section can help you calculate the efficiency factors best suited to your Supervised Agricultural Experience program. The section entitled, "How to Calculate Efficiency Factors," can assist you in finding and calculating information for these formulas.

Efficiency Factors for Non-production Agriculture Businesses

Return on Investment

$$\frac{\text{Net income}}{\text{Total investment}} = \text{Return on Investment}$$

Inventory Turnover

$$\frac{\text{Value of total cash and credit sales}}{\text{Average retail value of inventory}} = \text{Inventory Turnover}$$

**Special Tip:**

Use the most frequent inventory values available to calculate average retail value. For example, if an inventory is taken quarterly, then use this process:

Value of beginning inventory.....	\$8,200
March 31.....	\$9,500
June 30.....	\$7,400
Sept. 30.....	\$11,200
<u>Dec. 31.....</u>	<u>\$9,200</u>
	\$45,400

45,500 divided by 5 = \$9,100 Average retail value of inventory



Special Tip: Use the retail, not cost, value for inventory for this factor.

Percent Markup on Retail

$$\frac{\text{Retail value minus cost}}{\text{Retail value}} \times 100 = \text{Percent Markup on Retail}$$

**Example:**

A garden hoe sells for \$10 and costs \$6 to purchase.

$$\frac{\text{Retail value } (\$10) \text{ minus cost } (\$6)}{\text{Retail value } (\$10)} = .40$$

$$.40 \times 100 = 40 \text{ Percent Markup on Retail}$$

Gross Profit Percentage

$$\frac{\text{Net cash and credit sales minus cost of goods sold}}{\text{Cash and credit sales}} \times 100 = \text{Percent Gross Profit}$$

**Example:**

Sales minus returns and allowances	\$21,000
Cost of goods sold	\$14,700
Gross profit	\$6,300

$$\frac{21,000 - 14,700}{21,000} = .30 \times 100 = 30 \text{ percent (Gross Profit Percentage)}$$

! Special Tip: Include inventory changes in the cost of goods. Use this formula:

Beginning inventory at cost	_____
Merchandise purchased for sale	_____
Cost of freight in	_____
TOTAL	_____
Minus	
Ending inventory at cost	_____
Cost of goods sold	_____



Example:

Beginning inventory of merchandise for sale	\$3,200
Merchandise purchased	\$14,500
Freight in costs	\$500
TOTAL	\$18,200
Ending inventory	- \$3,500
Cost of goods sold	\$14,700

Average Collection Period

$$\frac{\text{Total cash and credit sales}}{365 \text{ days}} = \text{Average daily sales per calendar day}$$

$$\frac{\text{Inventory of accounts receivable}}{\text{Average daily sales per calendar day}} = \text{Average Collection Period}$$

Miscellaneous

You can devise your own efficiency factors to evaluate your award area. Since factors you devise are not likely to have established standards, you should calculate them over a period of several years to show trends and progress.



Example:

You have an outdoor recreation enterprise where you provide trail rides to paying customers. You now own six horses and rent four more to guarantee mounts for your guests. You carefully track the number of hours guests ride. You decide that a measure of efficiency in your business would be the number of guest hours per horse. Your records look like this:

<u>Year</u>	<u>Guest hours</u>	<u>Number of horses</u>	<u>Hours per horse</u>
2003.....	4,050.....	6.....	675
2004.....	5,996.....	8.....	737
2005.....	7,450.....	10.....	745

Gross profit percentage continued on page 42

Crop Efficiency Factors

The following efficiency factors could be used in the grain production, diversified crop, fiber and oil crop, forage, fruit and/or vegetable production and specialty crop production proficiency award areas.

The term crop refers to the specific type of species in which you attained the efficiency.

Yield Per Acre

This factor equals the total bushels, tons or pounds of crop produced, divided by the number of acres you used to produce the crop.



Example:

32,000 pounds of oats grown on 10 acres would have a yield of 100 bushels per acre.
 32,000 pounds of oats = 3,200 pounds/10 acres
 3,200 pounds/acre = 100 bushels/acre
 32 pounds/bushel

Cost Per Bushel, Ton or Pound

This factor is the total cost involved in producing a given unit of a specific crop.



Example: 10 acres of oats

Fertilizer cost	\$214.20
Crop chemicals	\$35.00
Seed	\$37.70
Custom hire	\$49.90
Power and machinery cost	\$191.60
Land rent.....	\$221.40
Interest on borrowed capital	\$36.60
Total Cost	\$786.40

\$786.40 for 1,000 bushels production = 79¢



Swine Efficiency Factors

Feed Cost per Pound of Pork Produced

$$\frac{\text{Total feed expense (See Appendix I)}}{\text{Total pounds of pork produced (See Appendix I)}} = \text{Feed Cost per Pound of Pork Produced}$$

Number of Pigs Farrowed Per Litter

$$\frac{\text{Total number of pigs farrowed}}{\text{Total number of litters}} = \text{Total Number of Pigs Farrowed per Litter}$$

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Special Tip: Confirm that your application indicates whether your swine enterprise is a farrow-to-finish, a finishing-only or an operation that only produces weaning pigs for sale to other feeders. Efficiency factors, which are reported under Section VII, will be judged on a different set of standards, depending upon the kind of swine enterprise conducted.
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Special Tip: Do not use the "Feed Cost per Pound of Pork Produced" efficiency factor if your swine enterprise only consists of producing weaning pigs to be sold to others.

Efficiency Factors (continued)

- ! **Special Tip:** Calculate the “Total Number of Pigs Farrowed” by including all full-term pigs born dead or alive.
- ! **Special Tip:** Calculate the “Total Number of Litters” by including all litters that produced one or more pigs, whether dead or alive.
- ! **Special Tip:** Calculate the “Average Daily Gain for Market Swine” by including only those animals that are in the finishing enterprise. Do not include breeding stock.

Number of Pigs Weaned per Litter

$$\frac{\text{Total number of pigs weaned}}{\text{Total number of litters}} = \text{Total Number of Pigs Weaned per Litter}$$

Return for \$100 Worth of Feed Fed

$$\frac{\text{Total swine enterprise income (See Appendix I)} \times 100}{\text{Total feed expense (See Appendix I)}} = \text{Return for \$100 Worth of Feed Fed}$$

Pounds of Feed Fed per Pound of Gain

$$\frac{\text{Total pounds of feed fed (See Appendix I)}}{\text{Total pounds of pork produced (See Appendix I)}} = \text{Pounds of Feed fed per Pound of Gain}$$

Average Daily Gain for Market Swine

$$\frac{\text{Total pounds of market swine produced (See Appendix I)}}{\text{Number of swine} \times \text{days on feed for market swine}} = \text{Average Daily Gain}$$



Example:

First, calculate number of swine:

Finishing hogs on-hand	January 1–January 31	-	0
Finishing hogs on-hand	February 1–May 31	-	120
Finishing hogs on-hand	June 1–June 15	-	15

Days on Feed

February	28
March	31
April	30
May	<u>31</u>
	120 days

June 15 days

Number of Swine x Days on Feed

120 days x 120 pigs =	14,400 pig days
15 days x 15 pigs =	225 pig days

Number of Swine x Days on Feed = 14,625 pig days

$$\frac{\text{Total pounds of market swine produced (17,696)}}{\text{Pig days (14,625)}} = 1.21 \text{ Pounds Average Daily Gain for the Market}$$

Poultry Efficiency Factors

Number of Eggs Per Hen Housed

$$\frac{\text{Total number of eggs produced}}{\text{Average number of hens housed (See Appendix I)}} = \text{Number of Eggs per Hen Housed}$$

Feed Cost Per Dozen Eggs Produced





$$\frac{\text{Total feed expense (See Appendix I)}}{\text{Dozen of eggs produced}} = \text{Feed Cost per Dozen Eggs Produced}$$

Pounds of Feed Fed Per Pound of Broiler Gain

$$\frac{\text{Total pounds of feed fed (See Appendix I)}}{\text{Total pounds of broilers produced (See Appendix I)}} = \text{Pounds Feed Fed per Pound Broiler Gain}$$

Feed Cost per Pound of Broiler Gain

$$\frac{\text{Total feed expense (See Appendix I)}}{\text{Total pounds of broilers produced (See Appendix I)}} = \text{Feed Cost per Pound of Broiler Gain}$$

-  **Special Tip:** To determine and report the efficiencies obtained in turkey production, use the equivalent instructions provided for laying hens (turkey breeding flock) and broilers (turkey poult).
-  **Special Tip:** The average number of layers housed per year is determined by calculating the number on-hand the first day of each month, adding the number on-hand on December 31 and then dividing the total by 13.
-  **Special Tip:** Calculate the laying hen feed expense from the time the birds are transferred to the laying house from the pullet flock or from the date ready-to-lay pullets are purchased.
-  **Special Tip:** Calculate the total dozen of eggs produced, by including all eggs produced, whether they were sold, consumed in the home, bartered, given away, broken in handling or used in hatching.

Beef Efficiency Factors

Average Daily Gain for Finishing Cattle

$$\frac{\text{Total pounds of finishing cattle produced (See appendix I)}}{\text{Number of fat cattle x days on feed}} = \text{Average Daily Gain for Finishing Cattle}$$

Return for \$100 worth of Feed Fed for Finishing Cattle

$$\frac{\text{Total finishing cattle enterprise income (See appendix I)}}{\text{Feed expense (See appendix I)}} \times 100 = \text{Return for Total \$100 Worth of Feed Fed for Finishing Cattle}$$

Pounds of Feed Fed per Pound Gain for Finishing Cattle

$$\frac{\text{Total pounds of feed fed (See appendix I)}}{\text{Pounds of finishing cattle produced (See appendix I)}} = \text{Pounds of Feed Fed per Pound Total Gain for Finishing Cattle}$$

Feed Cost Per Pound of Gain for Finishing Cattle

$$\frac{\text{Total feed expense (See appendix I)}}{\text{Total pounds of finishing cattle produced (See appendix I)}} = \text{Feed Cost per Pound of Gain for Finishing Cattle}$$

Weight of Calves at Weaning (adjusted to 205 days)

$$\frac{\text{Total weight of all calves weaned (See Appendix I)}}{\text{Total number of calves weaned}} = \text{Weight of calves at Weaning}$$

Percent Calf Crop

$$\frac{\text{Total number of calves dropped}}{\text{Total number of cows bred}} \times 100 = \text{Percent Calf Crop}$$

Efficiency Factors (continued)

Percent of Calf Crop Weaned:

$$\frac{\text{Total number of calves weaned}}{\text{Total number of calves dropped}} \times 100 = \text{Percent of Calf Crop Weaned}$$

- ! **Special Tip:** Confirm that your application indicates whether your beef enterprise is a breeding-to-finishing, breeding-to-feeder or an operation that finishes feeders that were produced by another breeder. Efficiency factors, which are reported under Section VII, will be judged on a different set of standards, depending upon the kind of beef enterprise conducted.
- ! **Special Tip:** Consider animals a part of your cattle finishing enterprise at the time they are either purchased for or they are weaned and transferred from a breeding enterprise to the finishing enterprise.
- ! **Special Tip:** Adjust all calf weights to 205 days.
- ! **Special Tip:** Calculate the “Total Number of Calves Dropped” by including all full-term calves, regardless whether they were born dead or alive.
- ! **Special Tip:** Calculate the “Total Number of Cows Bred” by including all cows and heifers bred with the intention of holding them until calving.

Sheep Efficiency Factors

Feed Cost per Pound of Sheep and Lambs Produced

$$\frac{\text{Total feed expense (See Appendix I)}}{\text{Total pounds of sheep/lambs produced (See Appendix I)}} = \text{Feed Cost per Pound of Sheep and Lambs Produced}$$

Percent Lamb Crop

$$\frac{\text{Total number of lambs dropped}}{\text{Total number of ewes bred}} = \text{Percent Lamb Crop}$$

Pounds of Feed Fed per Pound Gain for Sheep and Lambs

$$\frac{\text{Total pounds of feed fed (See Appendix I)}}{\text{Total pounds of sheep and lambs produced (See Appendix I)}} = \text{Pounds of Feed Fed per Pound Gain for Sheep and Lambs}$$

Average Daily Gain for Lambs

$$\frac{\text{Total pounds of lambs produced (See Appendix I)}}{\text{Number of lambs x days on feed}} = \text{Average Daily Gain for Lambs}$$

- ! **Special Tip:** Confirm that your application indicates whether your sheep enterprise is a lambing-to-market, lamb-finishing or an operation that only produces weaning lambs for sale to other feeders. Efficiency factors, which are reported under Section VII, will be judged on a different set of standards, depending upon the kind of sheep enterprises conducted.
- ! **Special Tip:** Calculate the “Total Number of Lambs Dropped” by including all full-term lambs, regardless if they were born dead or alive.
- ! **Special Tip:** Calculate the “Total Number of Ewes Bred” by including all ewes and ewe lambs bred with the intention of holding them until lambing.
- ! **Special Tip:** Calculate the “Average Daily Gain for Lambs” by including only the animals that are in the finishing enterprise, not breeding stock.
- ! **Special Tip:** Calculate the “Average Daily Gain for Lambs” the same way that you compute the “Average Daily Gain for Market Swine” on page 44.

Average Weight of Fleece per Sheep Sheared

$$\frac{\text{Total weight of all fleece sheared}}{\text{Total number of sheep sheared}} = \text{Average Weight of Fleece per Sheep Sheared}$$

Return for \$100 Worth of Feed Fed

$$\frac{\text{Total sheep enterprise income (See Appendix I)}}{\text{Total feed expense (See Appendix I)}} \times 100 = \text{Return for \$100 Worth of Feed Fed}$$

Dairy Efficiency Factors

Average Annual Milk Production Per Cow

$$\frac{\text{Total pounds of milk produced (See Appendix I)}}{\text{Average number of cows (See Appendix I)}} = \text{Average Annual Milk Production per Cow}$$

Average Annual Butterfat Production Per Cow

$$\frac{\text{Total pounds of butterfat produced (See Appendix I)}}{\text{Average number of cows (See Appendix I)}} = \text{Average Annual Butterfat Production per Cow}$$

Average Annual Butterfat Percent for Herd

$$\frac{\text{Total pounds of butterfat produced (See Appendix I)}}{\text{Total pounds of milk produced (See Appendix I)}} = \text{Average Annual Butterfat Percent for Herd}$$

Feed Cost Per CWT of Milk Produced

$$\frac{\text{Total feed expense (See Appendix I)}}{\text{Pounds of milk produced (See Appendix I)}} \times 100 = \text{Feed Cost per CWT Milk Total Produced}$$

- ! **Special Tip:** Determine the average number of cows in production per year by calculating the number on-hand the first day of each month, adding the number on-hand on December 31 and then dividing the total by 13.
- ! **Special Tip:** Determine the total pounds of butterfat by multiplying the total pounds of milk produced by the average butterfat content in the milk you sold.

How to Calculate Data for Efficiency Factors

Use the following step-by-step explanations to find the information for computing figures for efficiency factors needed in Section 5. Refer to the section above for the actual formulas for these efficiency factors.

Total Feed Expense

Step One: Add the following:

- A. The value of purchased feed on-hand as of January 1.
- B. The value of home-grown feed on-hand as of January 1.
- C. The value of feed purchased during the year.
- D. The value of home-grown feed charged to this specific livestock enterprise during the year.
- E. The value of feed received through barter, exchange or as a gift during the year.

Step Two: Add the following:

- A. The value of purchased feed on-hand as of December 31.
- B. The value of home-grown feed charged to this specific enterprise during the year, but still on hand as of December 31.
- C. The value of feed bartered or given away as a gift during the year.
- D. The value of feed for this enterprise that was sold during the year.

Step Three: Total from Step One minus the total from Step Two equals...**Total Feed Expense**

Total Pounds of Meat Animal or Poultry Produced

Step One: Add the following:

- A. Total pounds of meat animal or poultry on-hand as of December 31.
- B. The total pounds of meat or poultry sold during the year.
- C. The total pounds of meat animal or poultry butchered during the year.
- D. The total pounds of meat animal or poultry bartered or given away as gifts during the year.
- E. The total pounds of meat animal or poultry that was transferred to another enterprise not part of this award area.

Step Two: Add the following:

- A. The total pounds of meat animal or poultry on-hand as of January 1.
- B. The total pounds of meat animal or poultry purchased during the year.
- C. The total pounds of meat animal or poultry received through barter, exchange or as gifts during the year.
- D. The total pounds of meat animal or poultry that was transferred to this enterprise from another enterprise not part of this award area.

Step Three: Total from Step One minus the total from Step Two equals...**Total Pounds Meat Animal or Poultry Produced**

Total Pounds of Feed Fed

Step One: Add the following:

- A. The pounds of purchased feed on-hand as of January 1.
- B. The pounds of home-grown feed on-hand as of January 1.
- C. The pounds of feed purchased during the year.
- D. The pounds of home-grown feed charged to the enterprise during the year.
- E. The pounds of feed received through barter, exchange or as gifts during the year.

Step Two: Add the following:

- A. The pounds of purchased feed on-hand as of December 31.
- B. The pounds of home-grown market feed charged to this particular enterprise, but still on-hand as of December 31.
- C. The pounds of feed bartered or given away as gifts during the year.
- D. The pounds of feed sold during the year.

Step Three: Total from Step One minus the total from Step Two equals... **Total Pounds of Feed Fed**

Average Number of Animals On-hand for the Year

Step One: Add the following:

- A. The number of animals on-hand the first day of each month.
- B. The number of animals on-hand on December 31.

Step Two: Total from Step One divided by 13 equals... **Average Number of Animals On-hand for the Year**

Example:		July 1	60
January 1	63	August 1	60
February 1	62	September 1	60
March 1	61	October 1	63
April 1	61	November 1	63
May 1	61	December 1	64
June 1	61	<u>December 31</u>	<u>58</u>
		Total	797

797 divided by 13 = 61.3 average animals on-hand for the year

Total Livestock-Animal Enterprise Income

Step One: Add the following:

- A. The value of all livestock-animals on-hand as of December 31.
- B. The value of all livestock-animals sold during the year.
- C. The value of all livestock-animals butchered during the year.
- D. The value of all livestock-animals bartered or given away as gifts during the year.
- E. The value of all miscellaneous income from livestock-animals, such as show premiums received during the year.
- F. The total value of all livestock-animals transferred out of this specific livestock enterprise.

How to Calculate Data for Efficiency Factors

Step Two: Add the following:

- A. The value of all livestock-animals on-hand as of January 1.
- B. The value of all livestock-animals purchased during the year.
- C. The value of all livestock-animals received through barter, exchange or as gifts during the year.
- D. The total value of all livestock-animals transferred into this specific livestock enterprise.

Step Three: Total from Step One minus the total from Step Two equals... **Total Livestock-Animal Enterprise Income**

205-Day Adjusted Weaning Weight (Beef Enterprise Only)

This measurement is the weight of a calf adjusted to a standard age of 205 days or to the age of the cow. Calves from cows that are two, three, four or 11 years old or older are adjusted upward in weight. The weight can also be adjusted for gender differences. Most adjustments are geared to a steer basis with heifer calves adjusted upward and bull calves adjusted downward. Adjusted weaning weight is often referred to as weaning weight.

Step One: Determine the adjusted 205-day weaning weight for each calf.

$$\frac{(\text{Actual weaning weight} - \text{Birth weight}^*) \times 205 + \text{Birth weight}^*}{\text{Age in Days}} = \text{Adjusted 205-day Weight}$$

**Birth weight in this formula is optional; however, if you use it, insert the weight in both places marked by the asterisks.*

Adjustment Factors

A very important variation in the growth rate of a calf can be associated with the differences in the age of the cows. Cows between the ages of five and 10 are considered mature. The following adjustment factors are added to dams not in this mature equivalent bracket:

Pounds to be added to obtain adjusted age-of-dam

205-day weight to adjust for age-of-dam

<u>Age-of-Dam</u>	<u>Male Calves</u>	<u>Female Calves</u>
2 years old	60 lb.	54 lb.
3 years old	40 lb.	36 lb.
4 years old	20 lb.	18 lb.
5–10 years old	0 lb.	0 lb.
11 years old and older	20 lb.	18 lb.



Example:

Bull calf #21 is born on March 1 with a birth weight of 80 lbs. The calf is from Dam #6, age 25 months. The calf weighed 505 lbs. on October 15.

505 lbs. (scale weight) minus 80 lbs. (birth weight) times 205 (adjusted days) plus 80 lbs. (birth weight) plus 60 (dam adjustment) equals 521.3 lbs. (adjusted 205-day weight)

Total Pounds of Milk Produced (Dairy, Dairy Goats and Milking Sheep)

Step One: Add the following:

- A. The total pounds of milk on-hand as of December 31.
- B. The total pounds of milk sold during the year.
- C. The total pounds of milk fed to calves, kids or other animals during the year.
- D. The total pounds of milk consumed in the home during the year.
- E. The total pounds of milk bartered or given away as gifts during the year.

Step Two: Add the following:

- A. The total pounds of milk on-hand as of January 1.
- B. The total pounds of milk received through barter, exchange or as gifts during the year.

Step Three: Total from Step One minus the total from Step Two equals... **Total Pounds Milk Produced (dairy, dairy goats and milking sheep)**

Note: Use the same formula for calculating the pounds of butterfat produced, substituting “pounds of butterfat” for “pounds of milk.” You can use the same procedure for all milk product derivatives, such as “solids not fat (SNF),” or “protein.”