

Name: \_\_\_\_\_

**ECON 337: Agricultural Marketing  
Spring 2014**

**Homework 5: Dairy Marketing  
Due: 04/01/2014**

1. Calculate the butterfat price, nonfat solids price, Class IV skim milk price, and Class IV price. SHOW YOUR WORK.

2. Calculate the butterfat price, other solids price, protein price, Class III skim milk price, and Class III price. SHOW YOUR WORK.

3. Calculate the Class II butterfat price, Class II nonfat solids price, Class II skim milk price, and Class II price. **SHOW YOUR WORK.**

4. Calculate the Class I butterfat price, Class I skim milk price, and Class I price. The applicable Class I differential is \$0.20 per cwt. **SHOW YOUR WORK.**

5. Calculate Producer A's and Producer B's milk values. Use the Class III and IV calculated values for the protein, butterfat, and other solids rate.

	Producer A	Producer B
Location/County	Story	Buena Vista
Class I Price Differential (map)	\$1.80	\$1.75
Class I Price Differential (calculated)	\$0.20	\$0.15
Butterfat	4.60%	4.40%
Protein	3.80%	2.90%
Other solids	6.10%	5.80%
Somatic cell count	100,000	410,000
Milk sold (cwt)	1,000	1,000

Producer A's Milk Values

	Amount	Rate	Value
Protein	_____ lbs	_____	_____
Butterfat	_____ lbs	_____	_____
Other solids	_____ lbs	_____	_____
Somatic cell count	_____	_____	_____
Producer Price Differential		_____	_____
Total value			_____
Value per cwt	_____ cwt		_____

Producer B's Milk Values

	Amount	Rate	Value
Protein	_____ lbs	_____	_____
Butterfat	_____ lbs	_____	_____
Other solids	_____ lbs	_____	_____
Somatic cell count	_____	_____	_____
Producer Price Differential		_____	_____
Total value			_____
Value per cwt	_____ cwt		_____



**Class I:**

Class I Price = (Class I skim milk price \* 0.965) + (Class I butterfat price \* 3.5)

Class I Skim Milk Price = Higher of advanced Class III or IV skim milk pricing factors + applicable Class I differential

Class I Butterfat Price = Advanced butterfat pricing factor + (applicable Class I differential / 100)

**Class II:**

Class II Price = (Class II skim milk price \* 0.965) + (Class II butterfat price \* 3.5)

Class II Skim Milk Price = Advanced Class IV skim milk pricing factor + \$0.70

Class II Butterfat Price = Butterfat price + \$0.007

Class II Nonfat Solids Price = Class II skim milk price / 9

**Class III:**

Class III Price = (Class III skim milk price \* 0.965) + (Butterfat price \* 3.5)

Class III Skim Milk Price = (Protein price \* 3.1) + (Other solids price \* 5.9)

Protein Price = ((Cheese price - 0.2003) \* 1.383) + (((Cheese price - 0.2003) \* 1.572) - Butterfat price \* 0.9) \* 1.17)

Other Solids Price = (Dry whey price - 0.1991) \* 1.03

Butterfat Price = (Butter price - 0.1715) \* 1.211

**Class IV:**

Class IV Price = (Class IV skim milk price \* 0.965) + (Butterfat price \* 3.5)

Class IV Skim Milk Price = Nonfat solids price \* 9

Nonfat Solids Price = (Nonfat dry milk price - 0.1678) \* 0.99

Butterfat Price = (Butter price - 0.1715) \* 1.211

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**Announcement of Class and Component  
Prices**


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**Announcement of Advanced Prices and Pricing Factors**


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**Product Price Averages:**

Butter	\$1.6475 (per pound)	Advanced Class III Skim Milk Pricing Factor:	\$12.99 (per hundredweight)
Nonfat Dry Milk	\$2.0335 (per pound)	Advanced Class IV Skim Milk Pricing Factor:	\$15.81 (per hundredweight)
Cheese	\$2.0838 (per pound)	Advanced Butterfat Pricing Factor:	\$1.7791 (per pound)
Dry Whey	\$0.6025 (per pound)		

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