Name:						
	ECON 337: Agricultural Marketing  Quiz: Dairy Marketing  03/14					
Please show all your work. Take per pound calculations to four decimal places (0.0000) and per cwt calculations to two decimal places (0.00).						
1.	(5 points) Calculate the butterfat price, nonfat solids price, Class IV skim milk price, and Class IV price.					
2.	(5 points) Calculate the butterfat price, other solids price, protein price, Class price, and Class III price.	III skim milk				

3.	(5 points) Calculate the Class II butterfat price, Class II nonfat solids price, Class II skim milk price, and Class II price.
4.	(5 points) Calculate the Class I butterfat price, Class I skim milk price, and Class I price. The applicable Class I differential is -\$0.80 per cwt.

5. (5 points) Calculate Producer A's milk values. Use the Class III calculated values for the protein, butterfat, and other solids rate. The somatic cell count amount equals 350 - (somatic cell count / 1,000) and the somatic cell count rate is \$0.00101.

	Producer A
Location/County	Story
Class I Price Differential (map)	\$1.80
Class I Price Differential (calculated)	-\$0.80
Butterfat	4.50%
Protein	3.90%
Other solids	5.80%
Somatic cell count	250,000
Milk sold (cwt)	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		
		_	

# 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

#### **Announcement of Class and Component Announcement of Advanced Prices and Pricing Factors Prices** Product Price Averages: Butter (per pound) Advanced Class III Skim Milk Pricing Factor: (per hundredweight) \$1.8410 \$13.77 Advanced Class IV Skim Milk Pricing Factor: (per hundredweight) Nonfat Dry Milk \$1.5143 (per pound) \$11.43 Advanced Butterfat Pricing Factor: \$2.1171 (per pound) Cheese (per pound) \$2.0146 (per pound) Dry Whey \$0.6480