

*Econ 337 Agricultural Marketing, Spring 2018*

In Class Activity 2, February 13, 2018

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

Announcement of Class and Component Prices			Announcement of Advanced Prices and Pricing Factors		
Product Price Averages:					
Butter	\$1.6475	(per lb)	Advanced Class III Skim Milk Pricing Factor:	\$12.99	(per cwt)
Nonfat Dry Milk	\$2.0335	(per lb)	Advanced Class IV Skim Milk Pricing Factor:	\$15.81	(per cwt)
Cheese	\$2.0838	(per lb)	Advanced Butterfat Pricing Factor:	\$1.7791	(per lb)
Dry Whey	\$0.6025	(per lb)			
Somatic Cell Adj Rate	\$0.000104	(1,000 cells)			