

Proposal # 17
Simplify the Protein Price Formula

1. Original Protein Formula **$((\text{Cheese} - .1702) \times 1.405) + (((\text{Cheese} - .1702) \times 1.582) - \text{butterfat price}) \times 1.28) = \text{Protein}$**

2. Multiply the second number by the 1.28 **$((\text{Cheese} - .1702) \times 1.405) + ((\text{Cheese} - .1702) \times 1.582 \times 1.28) - \text{butterfat price} \times 1.28 = \text{Protein}$**

3. Factor out (Cheese - .1702) from the first two numbers **$(\text{Cheese} - .1702) \times (1.405 + 1.582 \times 1.28) - \text{butterfat price} \times 1.28 = \text{Protein}$**

4. Multiply and add the values in the second number **$(\text{Cheese} - .1702) \times 3.42996 - \text{butterfat price} \times 1.28 = \text{Protein}$**

5. Factor out the 3.42996 **$((\text{Cheese} - .1702) - (\text{butterfat price} \times 1.28) \div 3.42996) \times 3.42996 = \text{Protein}$**

6. Divide the 1.28 by the 3.42996 **$((\text{Cheese} - .1702) - (\text{butterfat price} \times .3732)) \times 3.42996 = \text{Protein}$**

7. Invert and divide the 3.42996 **$((\text{Cheese} - .1702) - \text{butterfat price} \times .3732) \div .2915 = \text{Protein}$**