**2011 Virginia State Fair – Senior Team Problem Team Name \_\_\_\_\_\_\_**

You have a spring cow-calf operation of a 105 commercial cows located in the Shenandoah Valley of Virginia. Its weaning time and you are in the process of deciding to either background your calves or sell them today. Today you just weaned 102 calves that consist of 55 steers and 47 heifers. The steers calves weighed an average of 615 lbs. and the heifers weighed 585 lbs.

1. If a 600 lbs. steer is worth $1.36 per pound, what is your average steer worth per pound today? (Round to the nearest penny)
2. You are trying to decide if you should wean the calves and background them to heavier weights. Current feed price for a 14 % protein commodity blend at your local cooperative is $265 per ton. Your hay cost is $80 per ton of grass hay. You plan on the group of calves to eat about 2% of their body weight of hay. How many pounds of hay will the group of steer calves eat per day during weaning? (Round up to the nearest pound)
3. What is the average cost of hay per head per day for the steer calves? (Round to the nearest penny)
4. You plan on backgrounding the steer calves for 120 days. How much will it cost to feed the entire group of steer calves just hay during the backgrounding phase? (Round to the nearest penny)
5. You plan on the group of calves to eat about 1.5% of their body weight of the 14% protein commodity grain. How many pounds of grain will the group of calves eat per day? (Round up to the nearest pound)
6. What is the average cost of grain per head per day? (Round to the nearest penny)
7. When backgrounded for 120 days, how much will it cost to feed the calves just the 14% protein commodity grain during the backgrounding phase? (Round to the nearest penny)
8. The total cost of backgrounding the calves is $11,314.46. During the 120 day backgrounding period, your steer calves gained an average of 280 lbs. Your cost per pound of gain is $0.74. In February, you estimate that an 800 lbs. steer will sell for $1.25 per pound. What is your estimated average steer selling price per head? (Round to the nearest penny)
9. What is the gross difference of backgrounding the calves and selling them in February compared to the selling the calves at weaning? (Round to the nearest penny)
10. What is your net profit or loss per steer? (Round to the nearest penny)