

Team Name ANSWER KEY

Team Number _____

2006 State Fair Stockmens Contest – Senior Team Problem

You are a custom hog feeder for an integrated company. You get pigs weighing 60 pounds, and sell them at 260 pounds.

1. Historically, your feed efficiency has been 2.8 : 1. If this continues, how much feed will it take to produce 1 market hog?

560

Pounds,
0 decimal

2. Your pigs typically are on feed for 108 days. What is the Average Daily Gain?

1.85

Pounds,
2
Decimals

3. One ton of the ration fed from 60 to 150 pounds consists of 1560 pounds of corn and 440 pounds of soybean meal, and contains 18% protein. The ration fed from 150 pounds to 260 pounds is changed to 16% protein. If corn is 9% protein and soybean meal is 50% protein, **how many pounds of soybean meal is in 1 ton of the 16% ration?**

341

4. Ractopamine (brand name Pay-Lean) is added to the final ration to enhance leanness. The proper level is 4.5 grams in a ton of feed. The premix that is used contains 9 grams of Pay-Lean in 1 pound. How many pounds of premix are included in 1 ton of finished feed? Answer in pounds, 1 decimal

0.50

Lbs,
2
decimals

5. The truck hauling hogs to slaughter can hold 44,000 pounds. How many hogs are on a load?

169

Head,
0 decimals

6. If 1 truckload is shipped every 2 weeks, what is the total market hog production for the farm in 1 year?

4394

Head,
0 decimals

7. Payment is made to the grower based on 20 cents per pound of gain. How much is the grower paid per pig?

\$ 40.00

8. The average ration costs \$120 per ton. What is the feed cost per pig produced?

\$ 33.60

9. What is the total feed used in a year?

1230

Tons,
0
decimals

10. Average manure output is 1.2 gallons per head per day. Thus, annual manure output is approximately 200,000 gallons. If 3000 gallons are applied per acre to land where corn is grown, how many acres are needed to utilize the annual manure output?

66.7

Acres
1 Decimal