

Exercise

Purchase Put: Wheat

Part 1

Assumptions

- A wheat producer is producing 10,000 bu. of wheat for harvest delivery.
- The current date is May 15.
- Total cash costs of production are \$3.10/bu.
- The August basis is expected to be \$0.40/bu. under the MGE September wheat futures contract.
- The MGE September wheat futures contract (5,000 bu.) is currently trading at \$4.10/bu.
- A MGE September wheat \$4.10 put option contract can be purchased for \$0.22/bu.
- A premium of \$0.50/bu. is expected for 15 percent protein.

Determine

1. How could the producer use the option market to establish a minimum price?
2. When does a MGE September wheat option contract expire?
3. How many option contracts would the producer need to purchase to protect the price of the anticipated output?
4. Calculate the expected minimum price.

Part 2

Assumption

- For the following calculations, assume a MGE September wheat \$4.10 put was purchased on May 15 for \$0.22/bu. and the wheat is being sold on August 15.

Determine

1. If the August 15 wheat cash market is \$3.00/bu. and a MGE September wheat futures contract is trading for \$3.40/bu.:
 - a. What is the actual basis?
 - b. What is the minimum value of a MGE September wheat \$4.10 put option?
 - c. What is the net price received?
2. If the August 15 wheat cash market is \$4.50/bu. and a MGE September wheat futures contract is trading for \$4.80/bu.:
 - a. What is the actual basis?
 - b. What is the minimum value of a MGE September wheat \$4.10 put option?
 - c. What is the net price received?