

**ARE 415 – Introduction to Commodity Futures and Options
Spring 2018**

Homework 8 – due in class on Thursday, March 1

1. Suppose that you own a feed mill that needs to purchase one bushel of soybeans in November. You buy a call option on November futures with a strike price of \$12.00. (Assume that the futures contract calls for delivery of one bushel and that basis is zero.) The option costs you \$0.75. Draw a diagram that displays the net value of your position (or net purchase price) for a range of possible futures prices in November between \$10.00 and \$14.00. Carefully label all relevant values on the axes of the graph.

2. Suppose that you grow rice and will harvest one bushel of rice in September. You buy a put option with a strike price of \$12.00. (Assume that the futures contract calls for the delivery of one bushel and that basis is zero.) The option costs you \$0.75. Draw a diagram that displays the net value of your position (or net price received for your rice) for a range of possible futures prices in September between \$10.00 and \$14.00. Carefully label all relevant values on the axes of the graph.