ARE 415 - Introduction to Commodity Futures Markets
Assignment 5
Due in class on Tuesday, February 3rd

You manage a Quaker Oats manufacturing facility in Ravenna, Ohio. You need 10,000 bushels of oats in July 2018 to meet your production quota for that month. Today is February 2nd, 2018. The price of a July 2018 oats futures contract (ON18) today is $3.70 per bushel. The price of oats in Ravenna today is $4.10.

1. What is the basis today relative to the ON18 contract?

2. To hedge your July purchase, you purchase 2 ON18 contracts (5,000 bushels per contract) at $3.70. In July, to unwind the hedge, you sell 2 ON18 contracts and purchase 10,000 bushels of oats in the cash market in Ravenna.

   As of today, we don't know what the price of the ON18 contract will be in July and we don't know what the price of oats in Ravenna will be in July. Fill out the table below for the given different values of the ON18 price and the Ravenna cash price in July.

Scenarios in July	ON18 price	Price of Oats in Ravenna	Gain in futures position (total, not per bushel)	Total expenditure on oats in cash market	Total cost of oat acquisition (net of futures gain)
1	2.00	2.40			
2	3.00	3.40			
3	4.00	4.40			
4	5.00	5.40			
5	2.00	2.50			
6	3.00	3.50			
7	4.00	4.50			
8	5.00	5.50			
9	2.00	2.20			
10	3.00	3.20			
11	4.00	4.20			
12	5.00	5.20			