EE211 Section 1 Quiz 11 Answers

Factor Markets

The production function for wheat on Riley and Tyler's farm.
Assume that Riley and Tyler want to maximize their profit, that workers must be paid $200 each, and that wheat sells for $20 per bushel.

What is the optimal number of workers? That is, how many workers should they employ to maximize profit? Show your graph with explanation

Employment and output for Riley and Tyler's farm

Quantity of Labor L (workers)	Quantity of wheat Q (bushels)	MP of Labor	MRP =MR*MP of Labor
0	0		
1	19	19	380
2	36	17	340
3	51	15	300
4	64	13	260
5	75	11	220
6	84	9	180
7	91	7	140
8	96	5	100

MFC=W=$200; P=MR=$20

What is the optimal number of workers? The optimal number of worker is between 5 and 6 workers when MRP=MFC.