Economics 200 Bonus

1) Complete the table below: (7 points)

Labor	Capital	TP (Q)	MP	AP	TFC	TVC	TC	AFC	AVC	ATC	MC
0	8	0					100				
1	8		40								
2	8			50							
3	8			50							
4	8		30								
5	8	200									

Labor is paid a wage of $50/day.
All output is per day.
Where:
TP = total product; output; or quantity
MP = marginal product
AP = average product
TFC = total fixed cost
TVC = total variable cost
TC = total cost
AFC = Average fixed cost
AVC = average variable cost
ATC = Average total cost
MC = marginal cost

2) The firm depicted in the table below is in a PERFECTLY COMPETITIVE MARKET. Complete the following table: (6points)

Quantity	Price ($/unit)	Marginal revenue	Total revenue	Total cost	Average total cost	Marginal cost
0	$20			$200		
10				$300		
20				$460		
30				$660		
40				$1000		
50				$1500		

The profit maximizing price is $_____.

The profit maximizing quantity is _____.

The firm is making $_____ in profit.

3) (7 points) A monopolist can produce its output at a constant average and constant marginal cost of:

ATC = MC = 5

The monopoly faces a demand curve given by the following function:

Q= 53-P

And a marginal revenue curve that is given by the function:

MR = 53 – 2Q

a) Draw the following:
    a. The firm's demand curve
    b. The firm's marginal revenue curve
    c. The firm's marginal cost curve

b) What is the monopolist's profit maximizing price?

c) What is the profit maximizing quantity for this monopolist?

d) How much profit is the monopolist making?

e) Suppose the market is no longer depicted by a monopoly, but has become perfectly competitive. What would the profit maximizing price and quantity be if the market were perfectly competitive?