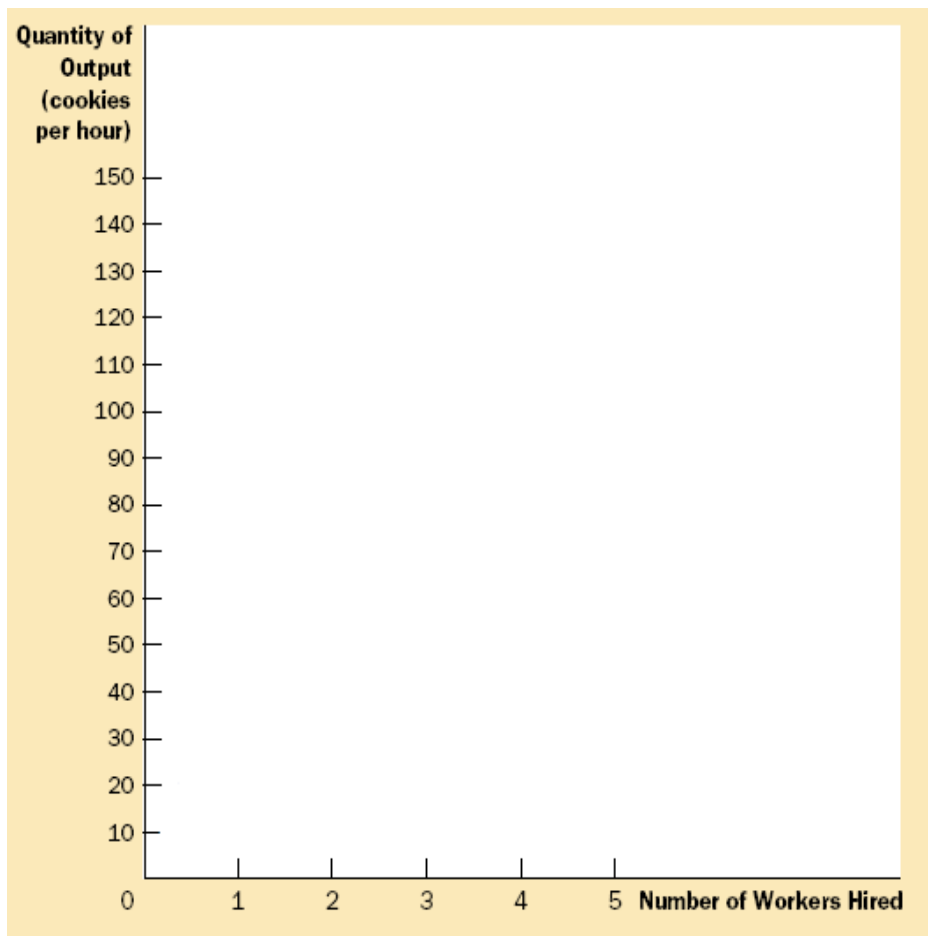


AAU - Microeconomics (ECO 120/2) - Spring 2010

1. Fill in the table below if you know that each worker's wage is 10.

Number of Workers	Output (Quantity)	Marginal Product of Labor	Cost of Factory	Cost of Workers	Total Cost of Inputs
0	0	—	30		
1	50		30		
2	90		30		
3	120		30		
4	140		30		
5	150		30		

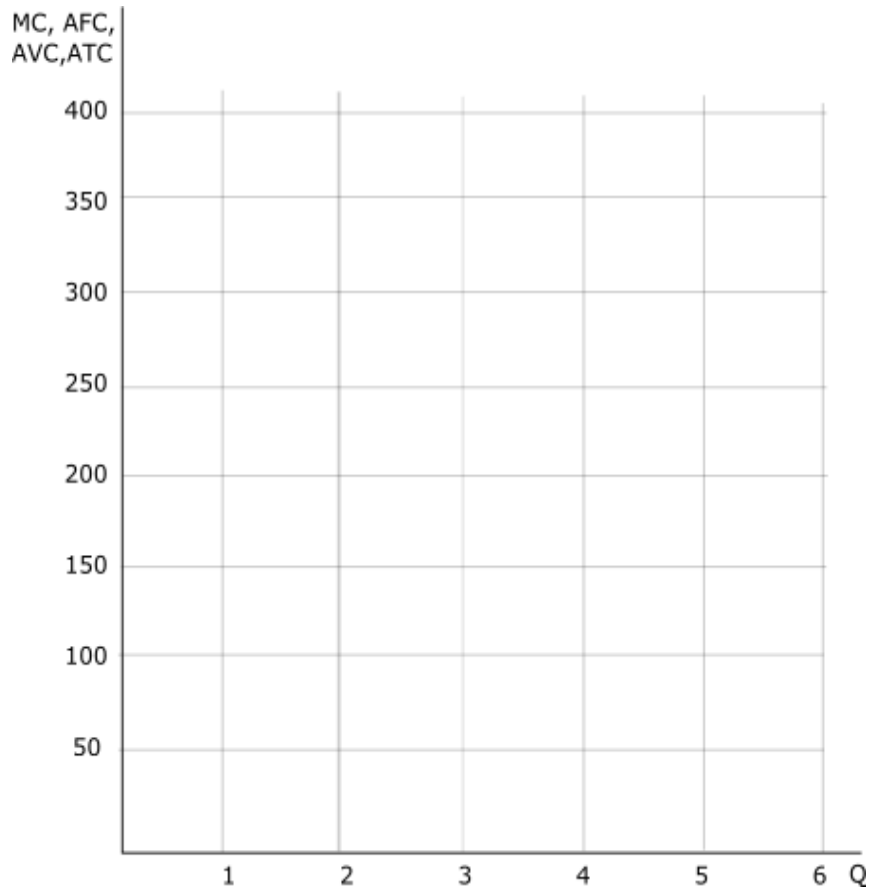
Draw the production function.



2. Suppose the following table includes the partial cost numbers for a firm. Based on your knowledge of the firm's cost structure, fill in the missing values in the table for the firms cost curves.

Q	FC	VC	TC	MC	AFC	AVC	ATC
0	100						
1		100					
2				80			
3				70			116.7
4			450				
5		500					
6		800					

3. Plot the MC, AFC, AVC and ATC curves.



Term	Definition	Mathematical Description
Explicit costs	Costs that require an outlay of money by the firm	–
Implicit costs	Costs that do not require an outlay of money by the firm	–
Fixed costs	Costs that do not vary with the quantity of output produced	FC
Variable costs	Costs that do vary with the quantity of output produced	VC
Total cost	The market value of all the inputs that a firm uses in production	$TC = FC + VC$
Average fixed cost	Fixed costs divided by the quantity of output	$AFC = FC/Q$
Average variable cost	Variable costs divided by the quantity of output	$AVC = VC/Q$
Average total cost	Total cost divided by the quantity of output	$ATC = TC/Q$
Marginal cost	The increase in total cost that arises from an extra unit of production	$MC = \Delta TC / \Delta Q$