

EE211 Section 1 Quiz 5 Answers

Fill in the column of marginal products, total cost in Table 1 and average fixed cost, average variable cost, average total cost, and marginal cost in Table 2.

Table 1: A production function and total cost: Chloe's Cookie Factory

Number of Workers	Output (quantity of cookies produced per hour)	Marginal product of labor	Cost of factory	Cost of workers	Total cost of inputs (cost of factory+cost of workers)
0	0		\$30	\$0	\$30
		50			
1	50		30	10	40
		40			
2	90		30	20	50
		30			
3	120		30	30	60
		20			
4	140		30	40	70
		10			
5	150		30	50	80
		5			
6	155		30	60	90

Table 2: The various Measures of Cost: Caleb's Coffee Shop

Output (cups of coffee per hour)	Total Cost	Fixed Cost	Variable Cost	Average Fixed Cost	Average Variable Cost	Average Total Cost	Marginal Cost
0	\$3.00	\$3.00	\$0.00	-	-	-	
							\$0.30
1	3.30	3.00	0.30	\$3.00	\$0.30	\$3.30	
							0.50
2	3.80	3.00	0.80	\$3.00/2	\$0.80/2	\$3.80/2	
							0.70
3	4.50	3.00	1.50	\$3.00/3	\$1.50/3	\$4.50/3	
							0.90
4	5.40	3.00	2.40	\$3.00/4	\$2.40/4	\$5.40/4	
							1.10
5	6.50	3.00	3.50	\$3.00/5	\$3.50/5	\$6.50/5	
							1.30
6	7.80	3.00	4.80	\$3.00/6	\$4.80/6	\$7.80/6	
							1.50
7	9.30	3.00	6.30	\$3.00/7	\$6.30/7	\$9.30/7	
							1.70
8	11.00	3.00	8.00	\$3.00/8	\$8.00/8	\$11.00/8	
							1.90
9	12.90	3.00	9.90	\$3.00/9	\$9.90/9	\$12.90/9	
10	15.00	3.00	12.00				

Students should draw 7 costs curves.