

# XYZ Company – 2009 Production Chart

Production Schedule			Costs				Revenues		Profit
Number of Workers	Total Product	Marginal Product*	Total Fixed Costs	Total Variable Costs	Total Costs	Marginal Costs	Total Revenue	Marginal Revenue	Total Profit
0	0	0	\$50	\$0	\$50	--	\$0	--	-\$50
1	10	10	50	90	140	\$9.00	150	\$15	10
2	21	11	50	180	230	8.18	315	15	135
3	38	17	50	270	320	5.29	570	15	250
4	62	24	50	360	410	3.75	930	15	520
5	97	35	50	450	500	2.57	1,455	15	955
6	133	36	50	540	590	2.50	1,995	15	1,405
7	162	29	50	630	680	3.10	2,430	15	1,750
8	182	20	50	720	770	4.50	2,730	15	1,600
9	194	12	50	810	860	7.50	2,910	15	2,050
10	200	6	50	900	950	15.00	3,000	15	2,050
11	197	-3	50	990	1,040	--	2,955	15	1,915
12	187	-10	50	1,080	1,130	--	2,805	15	1,675

- In the table above, fill in all the missing numbers to complete the production chart. Graph the Production function for this company and label the 3 stages of production. The point where the company will reach its profit-maximizing quantity of output is when it hires which numbered worker? Explain how you know.

## Graphing Production Function

