A competitive firm's short-run cost information is shown in the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| Output | Marginal Cost | Average Variable Cost | Average Total Cost |
| 0 |  |  |  |
| 1 | $ 8.00 | $ 8.00 | $ 17.00 |
| 2 | 7.00 | 7.50 | 12.00 |
| 3 | 6.00 | 7.00 | 10.00 |
| 4 | 5.00 | 6.50 | 8.75 |
| 5 | 6.00 | 6.40 | 8.20 |
| 6 | 7.00 | 6.50 | 8.00 |
| 7 | 8.00 | 6.71 | 8.00 |
| 8 | 9.00 | 7.00 | 8.13 |
| 9 | 10.00 | 7.33 | 8.33 |
| 10 | 11.00 | 7.70 | 8.60 |

1. If the market price is $5.25, how much will this firm produce? Enter in the second column of the table below. Repeat for the remaining prices shown in the table.
2. Fill in the next column to determine the market supply in this industry, assuming there are 2000 identical firms in the industry. Further suppose that the market demand schedule for this industry is given by the last column in the table.

|  |  |  |  |
| --- | --- | --- | --- |
| Price | Quantity Supplied, This Firm | Quantity Supplied, 2000 Firms | Quantity Demanded |
| $ 5.25 |  |  | 20,000 |
| $ 6.25 |  |  | 18,000 |
| $ 7.25 |  |  | 16,000 |
| $ 8.25 |  |  | 14,000 |
| $ 9.25 |  |  | 12,000 |
| $ 10.25 |  |  | 10,000 |

1. What is the equilibrium quantity in this market?
2. What is the equilibrium price in this market?
3. What are the resulting output, revenue, cost, and profit of the typical firm?