. Below is hypothetical data for a manufacturer which possesses a fixed plantproducing a commodity that requires only one variable input. Total Product is given. Total Fixed Cost is $220 per period. Units of thevariable input cost $100 per unit of variable input.. Complete the following table.

of

Var.

Input T.P. A.P. M.P. T.F.C. T.V.C. T.C. A.F.C. A.V.C. A.T.C. M.C

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 100 |  |  |  |  |  |  |  |  |  |
| 2 | 250 |  |  |  |  |  |  |  |  |  |
| 3 | 410 |  |  |  |  |  |  |  |  |  |
| 4 | 560 |  |  |  |  |  |  |  |  |  |
| 5 | 700 |  |  |  |  |  |  |  |  |  |
| 6 | 830 |  |  |  |  |  |  |  |  |  |
| 7 | 945 |  |  |  |  |  |  |  |  |  |
| 8 | 1050 |  |  |  |  |  |  |  |  |  |
| 9 | 1146 |  |  |  |  |  |  |  |  |  |
| 10 | 1234 |  |  |  |  |  |  |  |  |  |
| 11 | 1314 |  |  |  |  |  |  |  |  |  |
| 12 | 1384 |  |  |  |  |  |  |  |  |  |
| 13 | 1444 |  |  |  |  |  |  |  |  |  |
| 14 | 1494 |  |  |  |  |  |  |  |  |  |
| 15 | 1534 |  |  |  |  |  |  |  |  |  |
| 16 | 1564 |  |  |  |  |  |  |  |  |  |
| 17 | 1584 |  |  |  |  |  |  |  |  |  |
| 18 | 1594 |  |  |  |  |  |  |  |  |  |

1. When MP is >, what is happening to:

1) MC

* 1. AVC

1. When MC first begins to fall, does AVC begin to rise?
2. What is the relation between MC and AVC when MP = AP?
3. What is happening to AVC while AP is increasing?
4. Where is AVC when AP is at its maximum? What happens to AVC after this point?
5. What happens to MC after the point where it equals AVC?
6. How does it compare with AVC thereafter?
7. What is happening to MP thereafter?
8. How does MP compare with AP thereafter?
9. What happens to TFC as output is increased?
10. What happens to AFC as:
11. MP increases?
12. MC decreases?
13. MP decreases?
14. MC increases?
15. AVC increases?
16. How long does AFC decrease?

J. What happens to ATC as?

1. MP increases
2. MC decreases
3. AP increases
4. AVC decreases

K. Does ATC increase?

1. As soon as the point of diminishing marginal returns is passed?
2. As soon as the point of diminishing average returns is passed?

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

In the table below are given the output (X), T.C., and Price for a firm. Complete the following table, and then answer the questions at the bottom of the table.

X T.C. P = A.R. = 52 T.R. A.T.C. M.C. M.R. Specific Profit (+) or Loss (-)

0 72 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

1 90 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

2 112 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

3 138 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

4 168 \_\_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

5 202 \_\_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

6 240 \_\_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

7 282 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

8 328 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

9 378 \_\_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_

10 432 \_\_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_

1. The profit maximization level of output (PMS) for a price of $52 is \_\_\_\_\_\_\_\_\_\_units of output with a (profit/loss) \_\_\_\_\_\_\_ of $ \_\_\_\_\_\_\_\_

1. At various prices below, indicate the Quantity Supplied and its corresponding Profit or Loss (exact amount)

Price Quantity Supplied Profit or Loss (exact amount)

54 \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

46 \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

42 \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

38 \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

34 \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_

26 \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_

16 \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_