**Case Study: Maximize Profit from Lemonade Sales!**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. To make each cup of lemonade, how much did Terry have to pay for the lemons, sugar, and cups? \_\_\_\_\_\_\_\_\_\_

2. How much did Terry have to pay (per cup sold) to rent a desk for the lemonade stand? \_\_\_\_\_\_\_\_\_\_\_

3. According to Terry's figures, what was the total cost of production for one cup of lemonade? \_\_\_\_\_\_\_\_\_

4. Which resource did Terry forget to consider when figuring the cost of production? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Complete the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F |
| PRICE:(Market Survey) | QUANTITY:(Market Survey) | TOTAL REVENUE:(A x B) | COST PER UNIT:(From Cost Records) | TOTAL COST:(B x D) | TOTAL PROFIT:(C - E) |
| Possible priceper cupof lemonade | Number of cupsof lemonadethat could be sold | Total salesfor lemonadeat this price | Cost to produceone cup of lemonade | Total cost of producingthis much lemonade | Profit from lemonade salesat this price |
| 50 |  |  |  |  |  |
| 40 |  |  |  |  |  |
| 30 |  |  |  |  |  |
| 25 |  |  |  |  |  |
| 20 |  |  |  |  |  |
| 15 |  |  |  |  |  |

6. To make the most profit (to maximize profit) Terry should sell each cup of lemonade for \_\_\_\_\_\_\_\_\_\_\_.

7. According to this market survey, Terry will be able to sell \_\_\_\_\_\_\_\_ cups of lemonade at this price.

8. Terry's market survey included six classmates from a class of 24 students. How should Terry decide how much lemonade to produce?

**Maximize Profit from Lemonade Sales!**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. To make each cup of lemonade, how much did Terry have to pay for the lemons, sugar, and cups? \_\_\_***17*\_\_\_\_\_\_\_**

2. How much did Terry have to pay (per cup sold) to rent a desk for the lemonade stand? **\_\_\_*2\_\_\_\_\_\_\_\_***

3. According to Terry's figures, what was the total cost of production for one cup of lemonade? ***\_\_\_19\_\_\_\_\_\_***

4. Which resource did Terry forget to consider when figuring the cost of production? \_\_\_\_\_\_\_***labor*\_\_\_\_\_\_\_\_\_**

5. Complete the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A | B | C | D | E | F |
| PRICE:(Market Survey) | QUANTITY:(Market Survey) | TOTAL REVENUE:(A x B) | COST PER UNIT:(From Cost Records) | TOTAL COST:(B x D) | TOTAL PROFIT:(C - E) |
| Possible priceper cupof lemonade | Number of cupsof lemonadethat could be sold | Total salesfor lemonadeat this price | Cost to produceone cup of lemonade | Total cost of producingthis much lemonade | Profit from lemonade salesat this price |
| 50 | ***0*** | ***0*** | ***19*** | ***0*** | ***0*** |
| 40 | ***1*** | ***40*** | ***19*** | ***19*** | ***21*** |
| 30 | ***2*** | ***60*** | ***19*** | ***38*** | ***22*** |
| 25 | ***6*** | ***150*** | ***19*** | ***114*** | ***36*** |
| 20 | ***12*** | ***240*** | ***19*** | ***228*** | ***12*** |
| 15 | ***18*** | ***270*** | ***19*** | ***342*** | ***-72*** |

6. To make the most profit (to maximize profit) Terry should sell each cup of lemonade for \_\_\_\_***25***\_\_\_\_\_\_\_.

7. According to this market survey, Terry will be able to sell \_\_\_\_***6****\_\_\_\_* cups of lemonade at this price.

8. Terry's market survey included six classmates from a class of 24 students. How should Terry decide how much lemonade to produce? ***One fourth of the class participated in the market survey. Terry can estimate that the***

***quantity demanded by the entire class will be 4 times as great (4 x 6 = 24 cups of lemonade), and prepare accordingly.***