|  |  |  |
| --- | --- | --- |
| **Cornell Notes** | **Topic/Objective:** Unit 2: Modeling a Business | **Name:** |
| Chapter 2.6: Breakeven Analysis  | **Class/Period:** |
| Functions (p.91 - 93) | **Date:** |
| **Essential Question:** What happens when revenue equals expense? |
|  |
| **Questions:** | **Notes:** |
| What are breakeven | Interpretation: Draw the graph: |
| points?  |  |
|  |  |
|  |  |
|  |  |
|  |   |
|  |  |
| How do you find breakeven | Set the expense equations and revenue equations equal to one another. |
| points using algebra? | Rewrite the resulting equation with zero on one side of the equal sign and all other terms |
|  | on the other side. You should have a quadratic equation that is of the form: ax2+bx+c=0. |
|  | The quadratic formula can be used to solve the quadratic equation for x: |
|  |  x =  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |   |
|  |   |
|  |  |
|  |  |
| **Summary:** |
|  |
|  |
|  |
|  |
| **Questions:** | **Notes:** |
| How do I find the breakeven | **Example 1:** The breakeven points can be found algebraically:  |
| points using algebra? | E = R |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| How do I find the expense | **Example 2:** The y-value of the breakeven point will be both the revenue and expense |
|  and revenue at the breakeven | values (remember, we were trying to figure out the price when revenue = expense). |
| points? | These values can be determined by substituting the values of *p* into the expense and  |
|  | revenue equations. |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| **Summary:** |
|  |
|  |
|  |
|  |