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Report

**Question: 4 - What would be the Annual total returns on cost of production for each product at Maximum price per unit?**

**Average Cost Per Unit**

The average cost per unit is a crucial metric in both accounting and manufacturing. It helps businesses determine the cost involved in producing each unit of product.

**This cost includes two main types of expenses:**

**Fixed Costs (FC):** These are expenses that do not change with the level of production. Examples include rent, salaries of permanent staff, and depreciation of factory machinery. These costs remain constant regardless of the number of units produced.

**Variable Costs (VC):** These costs vary directly with the level of production. Materials used in production, energy costs, and labor directly involved in manufacturing are considered variable costs. The more units you produce, the higher these costs will be.

**The formula to calculate the average cost per unit is:**

**Average Cost Per Unit = Total Units ProducedTotal Cost of Production**

**The total cost of production includes both fixed costs (FC) and variable costs (VC):**

**Total Cost of Production = Fixed Costs + Variable Costs**

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This calculation give a per-unit cost of production based on total production output and total costs involved.

**Annual Returns on Cost of Production**

The annual returns on cost of production measure how much profit is made per unit over the cost of production, considering the best possible scenario where each unit is sold at its maximum price. Here's how it's calculated:

**Maximum Price Per Unit**: This is the highest price at which each unit could potentially be sold. Setting this price requires understanding market demand, competitor pricing, and the perceived value of the product.

**Difference between Maximum Price and Average Cost:** This difference indicates the profit margin per unit sold. It is calculated by subtracting the average cost per unit from the maximum price per unit.

**Total Profit:** To find out the total profit, multiply the profit margin per unit by the total number of units produced.

The formula for calculating the annual returns is:

**Annual Returns=(Maximum Price Per Unit−Average Cost Per Unit)×Total Units Produced**

This give an estimate of the total profit that could be realized if all units were sold at their maximum price point over the course of a year.

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| --- | --- | --- | --- |
| **SKU** | **Profit Per Unit** | **Average Cost of per Unit** | **Annual Total Returns (Maximum Per Unit)** |
| XYZ2238 | 8180.2495 | 2.700830263 | 891671.4551 |
| XYZ1451 | 8171.5185 | 2.801815023 | 783599.2288 |
| XYZ2707 | 8130.6135 | 2.820765386 | 1145541.084 |
| XYZ3079 | 8106.81 | 2.733811516 | 1338672.814 |
| XYZ3593 | 8077.6805 | 2.51993697 | 1789993.371 |
| XYZ2566 | 8095.3475 | 2.642971064 | 1683418.972 |
| XYZ3171 | 8149.562 | 2.179791389 | 1072621.25 |
| XYZ3969 | 8123.022 | 2.105439364 | 1403251.31 |
| XYZ1223 | 8088.5845 | 2.420382166 | 1558451.521 |
| XYZ2985 | 7894.1865 | 3.105499387 | 2179462.725 |
| XYZ3225 | 7843.2655 | 3.052066718 | 2615329.514 |
| XYZ3712 | 8203.015 | 2.478834143 | 694860.2922 |
| XYZ3060 | 8188.28 | 2.864228668 | 763707.9449 |
| XYZ2785 | 8160.4715 | 2.624602721 | 922839.7091 |
| XYZ3382 | 8129.475 | 2.644576212 | 1217034.29 |
| XYZ1578 | 8165.962 | 2.54878716 | 1097358.101 |
| XYZ1905 | 8116.7115 | 2.623732477 | 1542183.202 |
| XYZ1583 | 8094.9035 | 2.577926777 | 1504711.948 |
| XYZ3705 | 8112.8945 | 2.42777957 | 1613769.513 |
| XYZ2059 | 8201.8515 | 2.743338971 | 693614.2417 |
| XYZ2523 | 8184.7395 | 3.026507244 | 762896.3612 |
| XYZ3972 | 8159.668 | 2.390558641 | 1032857.808 |
| XYZ3737 | 8145.694 | 2.423378648 | 1218076.325 |
| XYZ2975 | 8158.0065 | 2.753472693 | 1096393.852 |
| XYZ1186 | 8119.1535 | 2.64001814 | 1542106.483 |
| XYZ2380 | 8094.6655 | 2.505983917 | 1931338.393 |
| XYZ1679 | 8108.933 | 2.69361518 | 1612517.193 |
| XYZ3448 | 8154.6915 | 2.51956121 | 1075448.862 |
| XYZ3092 | 8089.699 | 2.395434189 | 1694666.371 |
| XYZ3247 | 8068.2405 | 2.580242117 | 1778874.256 |
| XYZ3834 | 8120.8765 | 2.14100448 | 1827110.076 |