

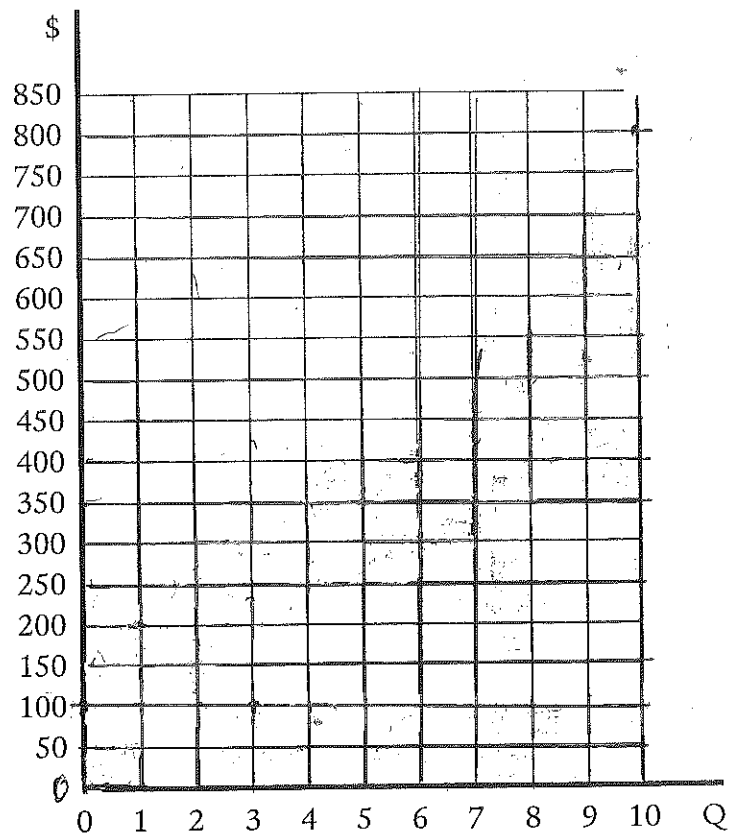
# Problem Set 4.1

## *The Fixed, Variable, and Total Cost of Production*

The table below provides production cost data for a firm.

| OUTPUT | VARIABLE COST | FIXED COST | TOTAL COST |
|--------|---------------|------------|------------|
| 0      |               |            | 100        |
| 1      | 100           |            |            |
| 2      | 175           |            |            |
| 3      | 225           |            |            |
| 4      | 250           |            |            |
| 5      | 260           |            |            |
| 6      | 275           |            |            |
| 7      | 325           |            |            |
| 8      | 400           |            |            |
| 9      | 500           |            |            |
| 10     | 700           |            |            |

1. Fill in the blanks in Table 4.1
2. Graph variable cost, fixed cost, and total cost on the graph below.
3. What is the relationship (if any) between VC and TC? Why?



## Problem Set 4.4

### *Daphne's Apparel Shop 2*

Classify the following as Fixed Costs or Variable Costs:

| COSTS              | FIXED COSTS | VARIABLE COSTS |
|--------------------|-------------|----------------|
| 1. Rent            | _____       | _____          |
| 2. Thread          | _____       | _____          |
| 3. Buttons         | _____       | _____          |
| 4. Wages           | _____       | _____          |
| 5. Electricity     | _____       | _____          |
| 6. Cloth           | _____       | _____          |
| 7. Equipment Rent  | _____       | _____          |
| 8. Shipping Costs  | _____       | _____          |
| 9. Insurance       | _____       | _____          |
| 10. Property Taxes | _____       | _____          |

Calculate the following costs for Daphne's apparel shop.

| PRODUCTION | FC    | VC    | TC    |
|------------|-------|-------|-------|
| 0          | _____ | _____ | 5     |
| 1          | _____ | 6     | _____ |
| 2          | _____ | 9     | _____ |
| 3          | _____ | 13    | _____ |
| 4          | _____ | 18    | _____ |
| 5          | _____ | 25    | _____ |
| 6          | _____ | 34    | _____ |
| 7          | _____ | 49    | _____ |
| 8          | _____ | 68    | _____ |

Graph the VC, FC and TC on the graph below.

