| Name | |
|------|------|
| Date | Hour |

How Do You Write a Function Rule From Tables?

- Use Guess and Check
- Ask yourself the question "What do I have to do to ______ to get _____?"

Rules and Tables

First: Try adding or subtracting something with the "x." **Second:** Try multiplying/dividing something with the "x."

Third: Try a combination of +, -, x, \div with the "x."

Fourth: Make sure the rule works for each pair of numbers.

Example 1: Write a function rule for each table.

a)

| X | У |
|---|---|
| 1 | 5 |
| 2 | 6 |
| 3 | 7 |
| 4 | 8 |

b)

| X | f(x) |
|---|------|
| 0 | 0 |
| 3 | 9 |
| 6 | 36 |
| 9 | 81 |

c)

| X | f(x) |
|----|------|
| 1 | 1 |
| 4 | 7 |
| 7 | 13 |
| 10 | 19 |

d)

| X | у |
|---|----|
| 1 | 2 |
| 2 | 5 |
| 3 | 10 |
| 4 | 17 |

e)

| , | |
|---|------|
| X | f(x) |
| 2 | 8 |
| 4 | 10 |
| 6 | 12 |
| 8 | 14 |

Example 2: The journalism class makes \$25 per page of advertising in the yearbook. If the class sells *p* pages of advertising, how much money will it earn?

a. Write a function rule to describe this relationship. Use E(p) for the amount earned.



b. The class sold 6 pages of advertising. How much money did it make?

Example 3: The journalism class makes \$25 per page of advertising in the yearbook. They spent \$200 to purchase a new software package for designing each page.

- a. Write a function rule to describe this relationship. Use M(p) for the amount of profit earned.
- b. How many pages will the class have to sell to break even?

Example 4: The choir spent \$100 producing audio disks of its last performance and will sell the disks for \$5.50 each.

- a. Write a rule to describe the choir's profit, P(d) as a function of the number of disks sold d.
- b. How much profit will the choir make if 50 disks are sold?

Homework: pgs. 256 – 259 #5 – 19 odd, 25 – 28 all, 36 – 40 all, and the exercise at the bottom of pg. 260