

Strand: Algebra

Name: KEY

Skill Addressed: Linear Relationships Explored

Blk: _____

Activity: Part 1: Table of Values

| | | | |
|-------|----|----|----|
| ... | 7 | 8 | 9 |
| | 10 | 11 | 12 |
| Row 1 | 13 | 14 | 15 |
| Row 2 | 16 | 17 | 18 |
| Row 3 | 19 | 20 | 21 |
| Row 4 | 22 | 23 | |
| | | | |

Joy made 3 columns and filled them with consecutive integers.

If 13 is her “start” number, complete the following T-Table of values:

| Which Term? | Value of Term | |
|-------------|---------------|---------------------|
| (x) | (y) | |
| 1 | 13 | $(1 \times 3) + 10$ |
| 2 | 16 | $(2 \times 3) + 10$ |
| 3 | 19 | $(3 \times 3) + 10$ |
| 4 | 22 | $(4 \times 3) + 10$ |
| | | |

- 1) Can you explain to Joy how to find the value of a term if she knows that her row is #6?

$(6 \times 3) + 10$

- 2) Is there a pattern for finding a value when you know the row number? Explain by using an algebraic expression or function.

If the row number is x, then $(x \times 3) + 10$ or $3x + 10$

As a function, it can be written as: $y = 3x + 10$

- 3) Write to explain to Joy how to find any value, if you know the row number.

Multiply the row number by three, and then add 10.