Name_____ Date_____ 30

Linear Relations – Exit Slip # 1

1 a) Complete the table below (3 marks)

| Input, x | Output , y |
|----------|------------|
| 1 | 12 |
| 2 | 17 |
| 3 | |
| 4 | |
| 5 | |

b) Write an equation to describe the relationship between x and y (1 mark).

c) Use your equation to find y when x = 9 (1 mark).

2) Describe the pattern in each table of values (5 marks)

| х | у |
|----|---|
| -2 | 8 |
| -1 | 6 |
| 0 | 4 |
| 1 | 2 |
| 2 | 0 |

x increases by _____ each time. Y decreases by _____ each time. The relation is _____, because a _____ change in x produces a constant change in ____.

3) In each equation, find the value of E when n = 5 (1 mark each)

| Unit 4 Vocabulary (| /18 Marks) |
|---------------------|------------|
|---------------------|------------|

| 1 | Vertical Axis | y-coordinate |
|----|-----------------------|---|
| | | |
| 2 | Horizontal Axis | Contains numbers, variables and/or operation symbols |
| 3 | Linear Relation | x – coordinate |
| 4 | Discrete Data | A mathematical statement that shows two expressions are equal. |
| 5 | Graph | Data on the graph that is not joined with a line. |
| 6 | Increase | x-axis |
| 7 | Decrease | A visual representation that shows a numerical relationship. |
| 8 | Pattern | To go down |
| 9 | Algebraic Expression | When the graph of a relation is a straight line. |
| 10 | Variable | To go up |
| 11 | Constant | y-axis |
| 12 | Numerical Coefficient | A design or sequence that is predictable because part of it repeats. |
| 13 | Value | Y = 3 x + 7 |
| 14 | Equation | How much something is worth or the output of a calculation. |
| 15 | Relation | Y=3 x + 7 |
| 16 | (3, 4) | When two variables are related, they form a |
| 17 | Ordered Pair | Y=3x + 7 |
| 18 | (3,4 | A set of two numbers named in a specific order; represented by (x, y) |