Name $\qquad$
$\qquad$

Line ar Relations - Exit Slip\# 1
1a) Complete the table below (3 marks)

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

6) 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).
7) Describe the pattern ineach table of values (5 marks)

| $x$ | $y$ |
| :---: | :---: |
| -2 | 8 |
| -1 | 6 |
| 0 | 4 |
| 1 | 2 |
| 2 | 0 |

$x^{x}$ increases $6 y \ldots \ldots$ each time.
$Y$ decreases by____ eacf time.
The relation is $\qquad$ , because a $\qquad$ change in $x$ produces a constant change in__.
3) In each equation, find the value of $\mathcal{E}$ when $n=5$ (1 markeach)
a) $\mathcal{E}=7+n$
6) $\mathcal{E}=4 n-6$

Ulit 4 Vocabulary ( / 18 Marks)

| 1 | Vertical $\mathcal{A x}$ is | $y$-coordinate |
| :---: | :---: | :---: |
| 2 | $\mathcal{H o r i z o n t a l ~} \mathcal{A x}$ is | Contains numbers, variables and/or operation symbols |
| 3 | Line ar Relation | $\chi$-coordinate |
| 4 | Discrete ${ }^{\text {Data }}$ | $\mathcal{A}$ mathematic al statement that shows two expressions are equal. |
| 5 | Grapk | Data on the graph that is not joined with a line. |
| 6 | Increase | $x$-axis |
| 7 | Decrease | $\mathcal{A}$ visual representation that shows a numerical relationskip. |
| 8 | Pattern | To go down |
| 9 | $\mathcal{A l g e 6 r a i c ~ E x p r e s s i o n ~}$ | When the graph of a relation is a straight line. |
| 10 | Variable | To goup |
| 11 | Constant | $y$-axis |
| 12 | $\mathcal{N}$ umeric al Coefficient | $\mathcal{A}$ design or sequence that is predictable because part of it repeats. |
| 13 | Value | $y=3 x+7$ |
| 14 | Equation | $\mathcal{H}$ w 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 | $y=3 x+7$ |
| 18 | (3, 4 | A set of two numbers named in a specific order; represented by $(x, y)$ |

