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Algebra
Unit 1 Line Master 4a

## Analyzing a Linear Relation

Start with the relation $y=3 x-4$, where $x$ is any number.

1. Determine the values of $y$ that complete the table of values.
2. Record the information from the table as a series of ordered pairs.
3. Graph the ordered pairs and join them

| $x$ | $y$ |
| :---: | :---: |
| -3 |  |
| -2 |  |
| -1 |  |
| 0 |  |
| 1 |  |
| 2 |  | with a line.


4. Why can you join the points on the graph with a line?
5. Is this an increasing or decreasing relation?

Explain how you know.
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Algebra
Unit 1 Line Master 4c

Analyzing a Linear Relation (cont'd)
6. What is the value of $y$ when $x$ is 6 ?

How can you determine the answer using the graph? How can you determine the answer using the equation?
7. Does the point $(4,9)$ lie on the graph? How do you know?

