## Algebra 2 Honors <br> Chapter 3 Vocabulary Review

Name
Date
Block
Define each of the following terms. Include examples or images to enhance your understanding.

| Term | Definition |
| :---: | :---: |
| Monomial |  |
| Polynomial |  |
| Degree of a <br> Monomial |  |
| Degree of a <br> Polynomial |  |
| Leading Coefficient |  |

Complete the table below.

| Polynomial | Degree | Classification by Degree |
| :---: | :---: | :---: |
| 8 |  |  |
| $5 x-3$ |  |  |
| $4 x^{2}+5 x-2$ |  |  |
| $5 x^{3}-8 x^{2}+10 x-1$ |  |  |
| $x^{4}-2 x^{3}+9 x+2$ |  |  |
| $3 x^{5}-7 x^{4}+2 x^{3}-8 x^{2}-9$ |  |  |

Classifying Polynomials by the Number of Terms: Ex. $4 x^{2}+3 x-7$
The polynomial above has $\qquad$ terms. Therefore it is a $\qquad$ .

| Polynomial | \# of Terms | Classification by the \# of Terms |
| :---: | :---: | :---: |
| 8 |  |  |
| $5 x-3$ |  |  |
| $4 x^{2}+5 x-2$ |  |  |
| $5 x^{3}-8 x^{2}+10 x-1$ |  | polynomial with four terms |

Now put it all together. Complete the following table.

| Polynomial | Leading <br> Coefficient | Degree | Classification by Degree | Classification by <br> the \# of Terms |
| :---: | :---: | :---: | :---: | :---: |
| $2 x^{3}-5 x^{2}-10 x+9$ |  |  |  |  |
| $3 x+1$ |  |  |  |  |
| $-6 x$ |  |  |  |  |
| $-x^{2}+3 x+9$ |  |  |  |  |
| $5 x^{4}-7 x^{3}+4 x-1$ |  |  |  |  |
| 9 |  |  |  |  |
| $2 x^{3}-8 x$ |  |  |  |  |
| $x^{2}-4 x+12$ |  |  |  |  |

