## Polynomials are named according to their degree and number of terms.

Degree: Largest exponent

| Degree | Name | Example |
| :---: | :---: | :---: |
| 0 | Constant | 8 |
| 1 | Linear | $-5 x$ |
| 2 | Quadratic | $6 x^{2}+3 x$ |
| 3 | Cubic | $-4 x^{3}+3 x^{2}-10$ |
| 4 | Quartic | $x^{4}+2 x-8$ |
| 5 | Quintic | $2 x^{5}+4 x^{2}-6 x+12$ |
| 6 or higher | 6th degree, <br> 7 th degree, etc. | $5 x^{6}+3 x^{3}-2 x^{2}+7$ |

Terms are separated by addition or isubtraction.

| Terms | Name | Example |
| :---: | :---: | :---: |
| 1 | Monomial | $6 x$ |
| 2 | Binomial | $7 x^{2}+3 x$ |
| 3 | Trinomial | $2 x^{4}-6 x^{3}+9$ |
| 4 or more | Polynomial | $x^{4}+2 x^{3}-8 x^{2}+2 x$ |

Let's Practice! Name the following polynomials:
$-7+3 n^{3} \quad$ cubic binomial (degree $=3$ and 2 terms)
5
constant monomial (degree $=0$ and 1 term)
$-x^{4}+3 x^{2}-11$ quartic trinomial (degree $=4$ and 3 terms)

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