Algebra Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_

Polynomials Warm Up

**Classify each polynomial by degree and number of terms.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Polynomial** | **By Degree** | **By Term** | **Leading Coefficient** |
| 1. -10x
 |  |  |  |
| 1. 7
 |  |  |  |
| 1. $-10r^{4}-8r^{2}$
 |  |  |  |
| 1. $-3n^{3}+n^{2}-10n$
 |  |  |  |
| 1. $9a^{6}+3a^{5}-4a^{4}-3a^{2}$
 |  |  |  |

**Simplify each expression.**

1. ($4m^{4}-m^{2})+ (5m^{2}+m^{4}) $= 7) $(5x+x^{4})-\left(3x^{4}+4x-2x^{2}\right) $=
2. (x + y)($x^{2}+y) $= 9) $(5x+x^{4})\left(3x^{2}+4-2x^{2}\right)$ =