**Collecting Like Terms & Adding Polynomials** (Math 9) Name

Period Date

**A) Identifying coefficients, variables, and exponents:**

Coefficient Variable Exponent

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Expression** | **Coefficient(s)** | **Variable(s)** | **Degree of each term** | **Degree of the polynomial** | **Type of polynomial**  **(mono, bi, tri, polynomial)** |
| 4x |  |  |  |  |  |
| 3x – 2 |  |  |  |  |  |
| -c2 – 5a2b2 |  |  |  |  |  |
| b2 + 4a2+6 - a |  |  |  |  |  |

Examples:

**B) Identifying like terms:**

Like Terms:

Non-examples:

Circle or square the terms that are like terms in each group:

i) -3g 8 100g -g2

ii) -3ab2 -2ab 3a2b ba 5b2a

**C) Collecting like terms:**

\*Like terms can be combined. Unlike terms cannot be combined.

Method 1: Using a model

Zero pairs:

-2x2 + 4x - 3 - x2 - 2x + 5

Practice: Make a model for -x2 – 3x + 5x – 4 + 4x2 – 2

Method 2: Rearranging and grouping like terms

i) 5x – 3x2 + 4x – 2x2 ii) h - 2h2 + 3 + 6h2 – 3h – 4

**D) Adding polynomials:**

**Homework Assignment:**

Pg. 179 – 180 Q’s 11-14

Pg. 187 -188 Q’s 7, 10, 11,12

Pg. 196 Q’s 6,7