

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Wksht 5.1 The Language of Mathematics

**1.** For each expression

i) identify the number of terms

ii) identify the expression as a monomial, binomial, or trinomial

a)  $-2x^2$

i) \_\_\_\_ ii) \_\_\_\_\_

b)  $a + b^2 + s$

i) \_\_\_\_ ii) \_\_\_\_\_

c)  $y - 5$

i) \_\_\_\_ ii) \_\_\_\_\_

d)  $3d^2 - 5xy$

i) \_\_\_\_ ii) \_\_\_\_\_

e)  $r$

i) \_\_\_\_ ii) \_\_\_\_\_

f)  $b^2 - 2b + 7$

i) \_\_\_\_ ii) \_\_\_\_\_

**2.** Identify each polynomial below as a monomial, binomial, or trinomial. If it is none of these, identify it as a polynomial.

$c + d$

$3y$

$-7e^2 - 4f$

$a^2 - 3n - 6a - 5n^2$

$x^2$

$m^2 - n - 8$

$a + 2b - 2c - 3d$

$4z^2 - y^2 - 6$

Monomials

Binomials

Trinomials

Polynomials

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3.** For each expression

i) identify the number of terms

ii) state whether the expression is a monomial, binomial, or trinomial

a)  $6t$

i) \_\_\_\_ ii) \_\_\_\_\_

b)  $x^2 + 3y - 2$

i) \_\_\_\_ ii) \_\_\_\_\_

c)  $9 - r$

i) \_\_\_\_ ii) \_\_\_\_\_

d)  $a - 2b + 4ab$

i) \_\_\_\_ ii) \_\_\_\_\_

e)  $-cd$

i) \_\_\_\_ ii) \_\_\_\_\_

f)  $5s^2 - st$

i) \_\_\_\_ ii) \_\_\_\_\_

**4.** State the degree for each of the polynomials in #3.

a) \_\_\_\_

b) \_\_\_\_

c) \_\_\_\_

d) \_\_\_\_

e) \_\_\_\_

f) \_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**5.** For each polynomial

**i)** state the degree

**ii)** state the number of terms

**a)**  $f + g + h$       i) \_\_\_\_\_

ii) \_\_\_\_\_

**b)**  $m^2 - mn + n^2$       i) \_\_\_\_\_

ii) \_\_\_\_\_

**c)**  $x - y$       i) \_\_\_\_\_

ii) \_\_\_\_\_

**d)**  $s^2$       i) \_\_\_\_\_

ii) \_\_\_\_\_

**e)** 31      i) \_\_\_\_\_

ii) \_\_\_\_\_

**f)**  $5d^2 + dh - 11h^2 + 3$       i) \_\_\_\_\_

ii) \_\_\_\_\_

**6.** Write the expression represented by each set of algebra tiles.



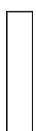
= positive 1-tile



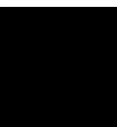
= negative 1-tile



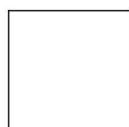
= positive  $x$ -tile



= negative  $x$ -tile



= positive  $x^2$



= negative  $x^2$

**a)** \_\_\_\_\_

**b)** \_\_\_\_\_

**c)** \_\_\_\_\_

**d)** \_\_\_\_\_

**7.** For the polynomial  $3a^2 - 4ac - 8$  state the following.

- a)** Number of terms \_\_\_\_\_      **b)** Coefficient of the first term \_\_\_\_\_
- c)** Coefficient of the second term \_\_\_\_\_      **d)** Number of variables \_\_\_\_\_
- e)** Degree of polynomial \_\_\_\_\_      **f)** Constant term \_\_\_\_\_