

### Intro Worksheet

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

A. Write an equivalent expression (\* is done for you)

1.  $x^3 = x * x * x$

2.  $2x^2y^3$

3.  $(2y)^3 =$

4.  $-2xxxxyy$

5.  $(x + 3)(x + 3)$

B. Simplify

1.  $(-2)^3 = (-2)(-2)(-2) = -8$

2.  $(-5)^2$

3.  $-5^2$

4.  $(1 + 3)^2$

5.  $5 * 4^2$

6.  $(5 * 4)^2$

C. Evaluate  $x = 3, y = -2$

1.  $x^3 - y^2$

2.  $(x + y)^3$

3.  $y^3 - x^2$

D. Simplify

1.  $[5^3 + (-3)^3] \div 7^2$

2.  $(3^4 - 2^4) \div [5^3 \div (4^2 + 3^2)]$

3.  $[2^2 * 3^3 - 3 * 2^4] \div [(2 * 3)^2 - 2^4]$

E. Simplify

1.  $x^2 * x^3$

2.  $(2x^2y)(-3x^4y^3)$