

## Multiplying Powers with Coefficients

Name \_\_\_\_\_

Date \_\_\_\_\_ HR \_\_\_\_\_

Simplify:

1.  $x^8 \cdot x^9$

2.  $y^7 \cdot y^{-5}$

3.  $z^0 \cdot z^6 \cdot z$

4.  $6x^5 \cdot 5x^3$

5.  $-2x \cdot 5y \cdot 7y^4$

6.  $-x^9(-2x^2)$

Write in STANDARD FORM:

7.  $-3^4$

8.  $(-5)^2$

9.  $(-4)^3$

10.  $(-2)(-2)(-2)(-2)$

11.  $(-5)(5)(5)(5)$

12.  $(-3)(-3)(-3)(x^2)(x^2)(x^2)$

EQUIVALENT EXPRESSIONS? Yes or No. Show your work!

13.  $12x^8$  and  $6x \cdot 2x^4$

14.  $-20x^5$  and  $-5x^2 \cdot 2x^2 \cdot 2x$

15.  $(-3^4)$  and  $-81$