

# MasterMath

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

## Multiplying and Dividing with Exponents

### 1. Please simplify these expressions

Expression	Simplified
$x^2 * x^5$	
$z^9 \div z^6$	
$(b^3)^4$	
$6^8 \div 6^7$	
$(15x^2y^3) \div (5xy^3)$	
$(z^2)^3$	
$(2x^2)^4$	
$(3x^2)^2 \div 3x$	

2.  $4^m / 4^5 = 4^3$ ; what does m equal?

3.  $(x^5)^2 / x^8 =$

4. Satellites have taken photographs of the earth from altitudes of  $2^{19}$  meters up to a height of about twice that. Express the higher altitude as an exponent.



5. This shape represents  $3^3$ . What would  $3^2$  look like?

