

Algebra Lesson 7-1A Zero and Negative Exponents

**Due Tomorrow: 7-1A p. 331 #1-21 odds**

$2^4=$	$3^4=$	$5^4=$
$2^3=$	$3^3=$	$5^3=$
$2^2=$	$3^2=$	$5^2=$
$2^1=$	$3^1=$	$5^1=$



$2^0=$	$3^0=$	$5^0=$
$2^{-1}=$	$3^{-1}=$	$5^{-1}=$
$2^{-2}=$	$3^{-2}=$	$5^{-2}=$

# Negative Exponents

$2^3 = 8$   
 $2^2 = 4$   
 $2^1 = 2$   
 $2^0 = 1$   
 $2^{-1} = \frac{1}{2}$   
 $2^{-2} = \frac{1}{4}$   
 $2^{-3} = \frac{1}{8}$

$3^3 = 27$   
 $3^2 = 9$   
 $3^1 = 3$   
 $3^0 = 1$   
 $3^{-1} = \frac{1}{3}$   
 $3^{-2} = \frac{1}{9}$   
 $3^{-3} = \frac{1}{27}$

Negative Exponent Property

$a^{-n}$  = the reciprocal of  $a^n$

$$a^{-n} = \frac{1}{a^n}$$

$$2^{-3} = \frac{1}{2^3} = \frac{1}{8}$$

