Zero Exponents

Section 10.6

Exponents & Negative numbers

- When negative numbers are raised to an exponent, the following rules hold true:
  - If the exponent is odd- the answer is negative
  - If the exponent is even- the answer is positive
- Examples:

Zero Exponent

$$a^0 = 1, a \neq 0$$

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

EXAMPLES

1. $x^0 y^5$

$1 \cdot y^5 = y^5$

2. $(xyz)^0$

$= 1$

3. $\left(\frac{a^5 b^4}{a^2 b^4}\right) = a^3 b^0$

$a^3 \cdot 1$

a^3

4. $\frac{a^5 b^4 c^0}{a^5 b}$ b^3

$1 \cdot b^3 \cdot 1$

CLASSWORK

- Wkst 8.2

HOMEWORK

- Pg 251 # 1-12