

## Chapter Review



### Number Operations

• operators in math  $+$ ,  $-$ ,  $\times$ ,  $\div$

$x + y$  "the sum of  $x$  and  $y$ "

$x - y$  "the difference of  $x$  and  $y$ "

$xy$  "the product of  $x$  and  $y$ "

$x \div y$  or  $\frac{x}{y}$  "the quotient of  $x$  and  $y$ "



### Variables

• letters or symbols that represent a number in algebra

Examples  $x, y, z$  or  $\pi$   
↑

this symbol is called  
"pi" it's approximately  
3.14



## Order of Operations

- Very important!
- The correct order you work out a math problem
- Remember by "PEMDAS"

Please Excuse My DEAR Aunt Sally.....

What is the order? PEMDAS

1. P - parenthesis - do what's inside first
2. E - exponents/powers next
3. M/D - multiplication/division from left → right
4. A/S - addition/subtraction from left → right

Example  $3(6 + 2^2) \div 15 + 5$

P  $3(\underline{6 + 2^2}) \div 15 + 5$

E  $3(6 + \underline{4}) \div 15 + 5$

M  $\underline{3(10)} \div 15 + 5$

D  $\underline{30} \div 15 + 5$

A  $2 + 5$

7 ANSWER



## Translating Verbal and Algebraic Phrases

- know key phrases, examples
- “a number” - variable
- “is” - = sign

$4x + y$

“four times a number plus another number”

“the product of two numbers plus 3”

$xy + 3$



## Equations/Inequalities/Solutions

Equations - math statements that have a equal sign, =.

Examples  $6 = 6$        $x + 2 = 8$

Equations with a variable are called “open sentences”

Inequalities - math statements that have a  $<$ ,  $>$ ,  $\leq$ ,  $\geq$ ,  $\neq$  symbol

Examples,  $9 > 2$  or  $3x + 6 \leq 12$

Solutions - Any value for a variable that makes AN equation or inequality true