Name_____

Unit 1 Test Review

<table>
<tr><td rowspan="3">Exponents</td><td>Write 8^3 as products and evaluate it.</td></tr>
<tr><td>Write 7x7x7x7 as an exponent.</td></tr>
<tr><td>$3^n = 81$</td></tr>
<tr><td>Order of Operations</td><td>Evaluate: $3 \times (3^2 + 4) - (10 + 17) \div 3^2$</td></tr>
<tr><td colspan="2">Which operation should be in parentheses to make this equation true?
$8 \times 3 + 2 + 4 \div 4 = 41$</td></tr>
<tr><td colspan="2">For a class assignment, Curtis and Kason had to evaluate the expression $3(2 + 2)^2 - 3$. Curtis said the answer is 141, and Kason said the answer is 45. Kason is correct. What did Curtis do wrong when he evaluated the expression?</td></tr>
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Commutative	
Associative	
Identity (+, -)	
Identity (x, ÷)	
Zero	
Distributive	Demonstrate Property
	Simplify 3 x 27 using the distributive property.

Words that mean add	Words that mean subtract
Words that mean multiply	Words that mean divide
Ways to represent multiplication:	Ways to represent division:

Write the expression: the product of a number and 3
Write the expression that represents the phrase '6 times the quotient of *a* number *q* divided by 3'?

Olivia started with an unknown amount of M&Ms. Her mother gave her 10 more. She then shared 3 with Alyssa and 2 with Jeffrey. Write an expression that shows how many M&Ms she had left at the end.	
Combining Like Terms	$3a^2 + 4 + 4a - 3 + 3a - a^2$
Monomial	Example
Polynomial	Example
Variable	
Coefficient	Example
Term	
Circle the terms Underline the coefficients Square the variables	$3x^2 + 2y + 3$
Write an expression with at least 3 terms that shows a difference of terms?	

Examine the expression below.

$$7 \cdot 3 + 4z \cdot 2$$

Name the terms that are being used to find a sum.

What is "substitution" in math?

Which expression does **not** have a value of 20 when $x = 2$?

a. $20 - x$

b. $x^2 + 16$

c. $6x - 4$

d. $12 + x^3$

Evaluate this expression if x=3 and y=2

$$3x+2(2x^2-4y)$$

Using complete sentences, explain the order of operations you used in the above expression

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$$\frac{3x}{2y}$$

Evaluate the expression above by substituting 4 for x and 3 for y.

Equivalent Expressions	Write three equivalent expression to $6x + 11$ 1. 2. 3.

Look at the 4 expressions below. Three of the expressions are equivalent.

W: $8p – 4 – 1$

X: $3 \cdot 2p – 5$

Y: $4p – 5 + 2p$

Z: $2p + 2p + 2p – 2 – 3$

Simplify each expression and tell which is <u>not</u> equivalent to the others.

My student studied for the test for at least 30 minutes.

Parent Signature_____Date_____