6.EE.A.1 Review for the Common Assessment-Expressions and Equations Part I

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| Standard 6.EE.1: Write and evaluate numerical expressions involving whole-number exponents.  • I can write **numerical expressions** involving whole number **exponents.** Ex. 34 = 3x3x3x3  • I can evaluate **numerical expressions** involving whole number **exponents**. Ex. 34 = 3x3x3x3 = 81 • I can solve **order of operation problems** that contain **exponents**. |
| Review Notes and Problems from your ISN: |
| Practice Problems:  Evaluate:  33 + 42 + 41 41 + 52 – 2\*3 3(4+7) – 2\*9 |
| Who solved their expression the correct way? Circle all that are correct!  400- 3 x 10 + 52 23 + 5 x 9 + 10 82 + (100 – 55) + 22 + 32 9 + 9x9 ÷ 9 - 9  397 x 10 + 25 8 + 5 x 9 + 10 64 + (45) +4 + 6 9 + 81 ÷ 9 - 9  3,970 + 25 8 + 45 + 10 119 9 + 9 -9  3995 63 9 |

6.EE.A.2a Review for the Common Assessment Part I

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| Standard 6.EE.2a: Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as 5 – y.  • I can use **numbers** and **variables** to **evaluate** expressions.  • I can translate **written phrases** into **algebraic expressions**.  • I can translate **algebraic expressions** into **written phrases**. |
| List 5 words for the following operations:  Addition  Division  Multiplication  Subtraction |
| Translate these written phrases into algebraic expressions:  Four more than y 14 less than a number The product of h and 12 The quotient of  C and 28 |
| Translate these algebraic expressions into written expressions. Use any appropriate word for the operational word. Highlight the word you chose.  2 + y 2 \* r h/7 k – 7 |
| Find match a written expression with the appropriate algebraic expression:  Sara had three times as many posters as Sue. 5h  Sue has p number of posters.  The cost of h hamburgers sold for $5.00 20c  The number of students in a school, if there 3p  Are c amount of classes and 20 students in each room |

6.EE.A.2.b Review for the Common Assessment Part I

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| **Standard 6.EE.2b**: Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression 2(8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.  • I can identify parts of an expression using **mathematical terms** (**sum, term, product, factor, quotient, coefficient**).  • I can identify **parts of an expression** as a single entity, even if not a monomial. |
| Describe the d**ifference** between an **expression** and **equation**. Give 2 examples of each. |
| **Define** the following words:  **Term Variable Coefficient Constant** |
| **Circle** the terms, **highlight** the coefficients, **underline** the constants  4y + 3 + 4t – 8 + 2h – 6 3h + 2j – 2 + 9 + 4y |
| Label each as an expression or an equation:  5y + 7 = 10 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4p – 8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  4y – 20 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 78 = 3r - |

6.EE.A.2c Review for the Common Assessment Part I

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| **Standard 6.EE.2c:** Evaluate expressions at specific values for their variables. Include expressions that arise from formulas in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).  • I can substitute **specific values** for **variables**.  • I can evaluate **algebraic expressions** including those that arise from real-world problems.  • I can apply **order of operations** when there are no parentheses for expressions that include whole number exponents. |
| Evaluate the following expressions if a = 3, b = 4, c = 5 (Rewrite each using parenthesis)  Show all steps!  4a + 3 2b + c 3a – 2b ab/2 |
| If h = 7, evaluate 5h + 18 If k = 4, evaluate 2(2k -3) |
| Which step by step process is correct? All? None? Only one of them? Circle the correct one.  Evaluate 4g + 6 ÷ 2 when g=3  4( 3) + 6 ÷ 2 4(3) + 6 ÷ 2 4(3) + 6 ÷ 2  4(9) + 6 ÷ 2 12 + 6 ÷ 2 12 + 6 ÷ 2  36 + 6 ÷ 2 18 ÷ 2 12 + 3  42 ÷ 2 9 15  21 |
| Evaluate the following expression: 3y + 2 x 9 + 2 + 4y if y = 10 |

6.EE.A.3 Review for the Common Assessment Part I

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| **Standard 6.EE.3:** Apply the properties of operations to generate equivalent expressions.  • I can create **equivalent expressions** using the properties of operations (e.g. distributive property, associative property, adding like terms with the addition property or equality, etc.).  • I can apply the **properties of operations** to create equivalent expressions. |
| Combining Like Terms-what should I remember? |
| Which expression is equivalent to 3(2r + 4s) -7  \_\_\_\_18rs – 7 \_\_\_\_6r + 12s – 7 \_\_\_\_\_6r + 4s - 7  Write an equivalent expression to k + k + k + k + 5 + k + 8:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| The product of two factors is 12n + 20. What are the factors?   * Find the GCF of 12 and 20. This is the number on the outside of the ( ). * Divide 12 and 20 by that GCF, 4. These numbers go on the inside of the ( ). * \_\_\_\_\_ (\_\_\_\_\_n + \_\_\_\_\_\_)   Try these!  The product of two factors is 14y + 7. The product of two factors is 15h + 25.  What are the factors? What are the factors?  \_\_\_\_\_\_(\_\_\_\_\_y + \_\_\_\_\_) \_\_\_\_\_\_(\_\_\_\_\_h + \_\_\_\_\_) |
| Which examples correctly use the Distributive Property?  7(4a + 9) = 28a + 63 5(4r + 7) = 20r +12 10h(2+9)= 10h + 90h=100h  3(3w + 12) = 9w + 36 4(8j + 3) = 12j +7 6(3k + 2m) = 18k + 12m |

6.EE.B.6 Review for the Common Assessment I

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| **Standard 6.EE.6:** Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.  • I can recognize that **a variable** can represent **an unknown number**, or, depending on the scenario/situation, any number in a specific set.  • I can relate **variables** to a context.  • I can write **expressions** when solving a real-world or mathematical problem. |
| Find the equation(s) that match this statement:  Sue is driving to her friend’s house and then home again. It is 5 miles from her house.  5(2)= d 2(5) = d 2d=5 5d=2 5+5=d 2+2=d  Chris is working for her father. She works on Tuesday, Wednesday and Thursday, and earns the same amount each day. If she earns $9.00, which equation shows how much she earns each day?  9 = n/3 9 + 9 + 9 = n 9/3 = n 3/9 = n n + n + n = 9 3n = 9 |
| **Standard 6.EE.4:** Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions y + y + y and 3y are equivalent because they name the same number regardless of which number y stands for.  • I can recognize when two **expressions** are **equivalent**.  • I can prove (using various strategies) that two **expressions** are **equivalent** no matter what number is substituted. |
| Which expressions are equivalent to 2(x2 + 6)?  2 \* x + 2 \* 6 2x2 + 6 2x2 + 12 x2 + x2  + 6 + 6 |
| Which expressions are equivalent to 8y2 + 2y2 + 4y2  10y2 + 4y2 7y + 7y 7y2 + 7y2 13y2 + y2 7y2 + 7y |