Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_ Period: \_\_\_\_\_\_ Date: \_\_\_\_\_\_

**3.1A Algebraic Expressions\_Classwork**

*Objective: apply properties of operations to simplify algebraic expressions; solve real-life problem.*

*CC.SS.7.EE.1 and CC.SS.EE.2*

Watch this and take notes: <https://www.youtube.com/watch?v=oXvjXsIU79A>

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| **Examples** | **Vocabulary Term** | **Definition** |
|  |  | A single number or variable Or numbers and variable multiplied together.  |
|  |  | Terms whose variable are the same. |
|  |  | A symbol for number that we don’t know yet, usually a letter. |
|  |  | A number used to multiply by a variable |
|  |  | A fixed value, a number on its own. |
|  |  | An expression that may contain numbers operations, and one or more symbols.  |

**EXAMPLE 1:**

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| 1. $5x+13$

Terms:Coefficients:Constant(s): | 1. $2z^{2}+y+3$

Terms:Coefficients:Constant(s): |
| 1. $12+10c$

Terms:Coefficients:Constant(s): | 1. $15+3w+\frac{1}{2}$

Terms:Coefficients:Constant(s): |
| 1. $z^{2}+9z$

Terms:Coefficients:Constant(s): | 1. $13$

Terms:Coefficients:Constant(s): |
| 1. $\frac{1}{2}x+\frac{3}{4}x-2-3y$

Terms:Coefficients:Constant(s): | 1. $1.3y^{2}+3.1yx+1.3yx$

Terms:Coefficients:Constant(s): |

Evaluate each algebraic expression when x=1. Then compare each expression in the left table and right table.

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| ***Value When:*** |
| ***Expression*** | ***X=1*** |
| $$3x+2-x+4$$ |  |
| $$5\left(x-3\right)+2$$ |  |
| $$x+3-(2x+1)$$ |  |
| $$2(1-x+4)$$ |  |
| $$-1\left(1-x\right)+3$$ |  |

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| ***Value When:*** |
| ***Expression*** | ***X=1*** |
| $$2x+6$$ |  |
| $$5x-13$$ |  |
| $$-x+2$$ |  |
| $$-2x+10$$ |  |
| $$x+2$$ |  |

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