Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CFS for top quality work**

* + Expression is **rewritten using addition**
  + Expression is **grouped** using the commutative property
  + All rational numbers are in the *same form*
  + Final expression is **equivalent** to original expression.

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UNIT 3 LESSON 4

**AIM**: SWBAT simplify expressions with rational numbers by combining like terms, applying the distributive property, and applying the order of operations

In my own words this means I will be able to…

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**THINK ABOUT IT!**

Simplify the following expression using any method and showing all your work:

Key Point

|  |
| --- |
| The same rules for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ property and combining like-terms apply to rational number \_\_\_\_\_\_\_\_\_\_\_\_\_ and constants. |

**Interaction with New Material**

Ex. 1) Simplify the following expression:

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**PARTNER PRACTICE**

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|  |
| --- |
| *Bachelor Level* |

1. Write the expression in simplest form:
2. Rewrite the following expressions in standard form by finding the product and collecting like terms.

|  |
| --- |
| *Master Level* |

1. Write the expression in simplest form:
2. Which of the expressions below are equivalent to the expression , and which are not? Justify each answer.

**INDEPENDENT PRACTICE**

**CFS for top quality work**

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  + All rational numbers are in the *same form*
  + Final expression is **equivalent** to original expression.

|  |
| --- |
| *Bachelor Level* |

1. Simplify the following expressions by rewritting with addition, grouping, and combining like-terms:
2. Apply the distributive property to simplify the expression:

|  |
| --- |
| *Master Level* |

1. Which expression(s) below are equivalent to the expression ? Circle all that apply.
2. Write an expression in simplest form for the following expression:
3. Simplify:
4. Rewrite the expression in simplest form:
5. Write the following expression in simplified form.
6. Choose a value of x to substitute to prove that your expression is equivalent

|  |
| --- |
| *PhD Level* |

1. Write an expression that is equivalent and in simplest form of the following expression:
2. Are the expressions -4.5n + 3 ½r – 2.25r – (-2 ¾n) and 1¼ ( 1.4n + r) equivalent? Prove it using two different methods.

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**EXIT TICKET**

|  |  |  |  |
| --- | --- | --- | --- |
| Self-assessment | I mastered the learning objective today. | I am almost there. | Need more practice and feedback. |
| Teacher feedback | You mastered the learning objective today. | You are almost there. | You need more practice and feedback. |

1. Write an expression in simplest terms that is equivalent to the expression 4n – n + 0.5n – 2n.
2. Write an expression in simplest terms that is equivalent to the expression: -5(-v + 6w – ½w) + (-5.3v)
3. Simplify the expression . Circle all equivalent expressions.