**Part 1:**

**Day 1: MGSE9-12.A.SSE.3** Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.

**MGSE9-12.A.SSE.2** Use the structure of an expression to rewrite it in different equivalent forms.

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| **Student (First name only)** | **Formative Assessment # 1 \_\_\_\_day1\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 2 \_\_\_\_day1\_\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 3 \_\_\_\_\_\_day1\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 4 \_\_day1\_\_\_\_\_\_** | **Formative Assessment # 5 \_\_\_\_\_day1\_\_\_\_\_\_\_\_\_** |
| **1** |  |  |  |  |  |
| 1 | 3/4 |  8/8 |  5/5 |  4/4 |  8/8 |
|  2 |  4/4 |  8/8 |  5/5 |  3/4 |  7.5/8 |
| 3 | 1/4 | 6/8 | 3/5 | 3.5/4 | 6/8 |
| 4 | 3/4 | 5/8 | 2/5 | 4/4 | 4/8 |
| 5 | 4/4 | 8/8 | 5/5 | 4/4 | 8/8 |
| 6 | 0/4 | 4/8 | 4/5 | 4/4 | 8/8 |
| 7 | 2/4 | 6/8 | 3.5/5 | 3.75/4 | 7/8 |
| 8 | 3.5/4 | 8/8 | 5/5 | 4/4 | 8/8 |
| 9 | 3/4 | 7/8 | 5/5 | 4/4 | 8/8 |
| 10 | 3/4 | 8/8 | 5/5 | 4/4 | 8/8 |
| 11 | 3/4 | 7/8 | 4.5/5 | 3/4 | 8/8 |
| 12 | 3/4 | 5/8 | 5/5 | 3/4 | 8/8 |
| 13 | 3/4 | 6/8 | 2/5 | 4/4 | 7/8 |
| 14 | 3/4 | 6/8 | 3/5 | 4/4 | 7/8 |
| 15 | 3/4 | 6/8 | 5/5 | 4/4 | 8/8 |
| 16 | 0/4 | 0/8 | 0/5 | 4/4 | 8/8 |
| 17 | 3/4 | 7/8 | 5/5 | 4/4 | 8/8 |
| 18 | 0/4 | 0/8 | 0/5 | 4/4 | 6/7 |

**Day 2: MGSE9-12.A.SSE.3** Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.

**MGSE9-12.A.SSE.2** Use the structure of an expression to rewrite it in different equivalent forms.

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| **Student (First name only)** | **Formative Assessment # 1 \_\_\_\_day2\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 2 \_\_\_\_day2\_\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 3 \_\_\_day2\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 4 \_\_day2\_\_\_\_\_\_** |
| **1** |  |  |  |  |
| 1 |  3/4 |  7/7 |  6/6 |  3/3 |
|  2 |  2.75/4 |  6/7 |  5/6 |  2/3 |
| 3 | 1/4 | 4/7 | 6/6 | 2.5/3 |
| 4 | 4/4 | 6.5/7 | 6/6 | 3/3 |
| 5 | 4/4 | 7/7 | 6/6 | 3/3 |
| 6 | 2/4 | 4/7 | 5/6 | 2.75/3 |
| 7 | 3/4 | 6/7 | 6/6 | 3/3 |
| 8 | 4/4 | 6/7 | 6/6 | 2.75/3 |
| 9 | 0/4 | 7/7 | 5/6 | 3/3 |
| 10 | 4/4 | 7/7 | 5.75/6 | 3/3 |
| 11 | 3.5/4 | 6/7 | 4.5/6 | 3/3 |
| 12 | 3/4 | 5/7 | 5/6 | 3/3 |
| 13 | 2/4 | 5/7 | 6/6 | 3/3 |
| 14 | 1/4 | 4/7 | 5/6 | 3/3 |
| 15 | 4/4 | 7/7 | 6/6 | 3/3 |
| 16 | 2/4 | 6/7 | 5/6 | 3/3 |
| 17 | 4/4 | 5/7 | 6/6 | 3/3 |
| 18 | n/a | n/a | n/a | n/a |

**Day 3: MGSE9-12.A.REI.4b** Solve quadratic equations by inspection, taking square roots, factoring, completing the square, and the quadratic formula, as appropriate to the initial form of the equation (limit to real number solutions).

**MGSE9-12.F.IF.7a** Graph quadratic functions and show intercepts, maxima, and minima (as determined by the function or by context).

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| **Student (First name only)** | **Formative Assessment # 1 \_\_\_\_day3\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 2 \_\_\_\_day3\_\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 3 \_\_\_day3\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 4 \_ day3\_\_\_\_\_\_** | **Formative Assessment # 5 \_\_\_\_\_day3\_\_\_\_\_\_\_\_\_** |
| **1** |  |  |  |  |  |
| 1 |  4/5 |  15/16 |  8/10 |  8/8 |  4/4 |
|  2 |  3/5 |  15/16 |  9/10 |  7/8 |  4/4 |
| 3 | 4/5 | 14/16 | 6/10 | 6/8 | 3/4 |
| 4 | n/a | n/a | n/a | n/a | n/a |
| 5 | 5/5 | 15/16 | 9/10 | 8/8 | 4/4 |
| 6 | 3/5 | 16/16 | 8/10 | 8/8 | 4/4 |
| 7 | 4/5 | 15/16 | 9/10 | 7/8 | 3/4 |
| 8 | 4/5 | 13/16 | 7/10 | 6/8 | 4/4 |
| 9 | 4/5 | 11/16 | 7/10 | 8/8 | 4/4 |
| 10 | 5/5 | 16/16 | 10/10 | 8/8 | 4/4 |
| 11 | 3/5 | 15/16 | 9/10 | 7/8 | 3.5/4 |
| 12 | 3/5 | 15/16 | 9/10 | 7/8 | 4/4 |
| 13 | 3/5 | 14/16 | 8/10 | 7/8 | 4/4 |
| 14 | 4/5 | 13/16 | 8/10 | 6/8 | 4/4 |
| 15 | 5/5 | 15/16 | 9/10 | 8/8 | 4/4 |
| 16 | 0/5 | 8/16 | 7/10 | 8/8 | 3/4 |
| 17 | 5/5 | 12/16 | 8/10 | 7.5/8 | 3.75/4 |
| 18 | n/a | n/a | n/a | n/a | n/a |

**Day 4: MGSE9-12.A.REI.4b Solve** quadratic equations by inspection, taking square roots, factoring, completing the square, and the quadratic formula, as appropriate to the initial form of the equation (limit to real number solutions).

**MGSE9-12.F.IF.7a** Graph quadratic functions and show intercepts, maxima, and minima (as determined by the function or by context).

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| **Student (First name only)** | **Formative Assessment # 1 \_\_\_\_day4\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 2 \_\_\_\_day4\_\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 3 \_\_\_\_\_\_day4\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 4 day4\_\_\_\_\_\_** |
| **1** |  |  |  |  |
| 1 |  4/4 |  3/3 |  6/6 |  2/2 |
| 2 |  3/4 |  3/3 |  5/6 |  2/2 |
| 3 | 3/4 | 2/3 | 6/6 | 1.5/2 |
| 4 | n/a | n/a | n/a | n/a |
| 5 | 4/4 | 3/3 | 6/6 | 2/2 |
| 6 | 2/4 | 2/3 | 5/6 | 2/2 |
| 7 | 3/4 | 2/3 | 4/6 | 2/2 |
| 8 | 0/4 | 2/3 | 5/6 | 2/2 |
| 9 | 4/4 | 3/3 | 3/6 | 1.75/2 |
| 10 | 3/4 | 2.75/3 | 6/6 | 2/2 |
| 11 | 2.75/4 | 3/3 | 5/6 | 2/2 |
| 12 | 0/4 | 2/3 | 5/6 | 2/2 |
| 13 | 2/4 | 2/3 | 4/6 | 2/2 |
| 14 | 6/6 | 8/9 | 6/9 | 10/10 |
| 15 | 6/6 | 8/9 | 9/9 | 10/10 |
| 16 | n/a | /na | n/a | 10/10 |
| 17 | 6/6 | 9/9 | 9/9 | 10/10 |
| 18 | n/a | 3/9 | 8/9 | 10/10 |

**Day 5: MGSE9-12.A.REI.4a** Use the method of completing the square to transform any quadratic equation in x into an equation of the form (x – p)2 = q that has the same solutions. Derive the quadratic formula from ax2 + bx + c = 0.

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| **Student (First name only)** | **Formative Assessment # 1 \_\_\_\_day5\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 2 \_\_\_\_day5\_\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 3 \_\_\_\_\_\_day5\_\_\_\_\_\_\_\_\_\_** | **Formative Assessment # 4 \_\_ day5\_\_\_\_\_\_** | **Formative Assessment # 5 \_\_\_\_\_day5\_\_\_\_\_\_\_\_\_** |
| **1** |  |  |  |  |  |
| 1 |  4/4 |  6/6 |  8/8 |  4/4 |  15/16 |
|  2 |  3/4 |  5/6 |  8/8 |  4/4 |  15/16 |
| 3 | 2/4 | 4/6 | 6/8 | 3/4 | 12/16 |
| 4 | 1/4 | 5/6 | 5.5/8 | 3/4 | 11/16 |
| 5 | 4/4 | 6/6 | 8/8 | 4/4 | 15/16 |
| 6 | 2/4 | 5/6 | 6/8 | 3/4 | 15/16 |
| 7 | 3.5/4 | 5/6 | 7.5/8 | 3.25/4 | 14/16 |
| 8 | 3/6 | 5/6 | 7/8 | 3/4 | 15/16 |
| 9 | 4/4 | 5/6 | 8/8 | 3/4 | 15/16 |
| 10 | 4/4 | 6/6 | 8/8 | 2/4 | 15/16 |
| 11 | 3/4 | 5/6 | 7.25/8 | 3/4 | 15/16 |
| 12 | n/a | n/a | n/a | n/a | n/a |
| 13 | 2/4 | 5/6 | 7.75/8 | 4/4 | 15/16 |
| 14 | 2/4 | 4/6 | 6.5/8 | 4/4 | 15/16 |
| 15 | 4/4 | 6/6 | 6.75/8 | 3/4 | 16/16 |
| 16 | 0/4 | 5/6 | 7/8 | 3/4 | 8/16 |
| 17 | 4/4 | 6/6 | 8/8 | 3.75 | 16/16 |
| 18 | n/a | n/a | n/a | n/a | n/a |

**Part 2: Describe your analysis of two (2) of the formative assessments. What information did you learn from the assessment (be specific)?**

**Part 3: Describe the feedback you gave to your students on at least one (1) of the assessments. Describe how your students used the feedback.**

**Day 4:**

**Formative Assessment 2**

**MGSE9-12.A.REI.4b Solve** quadratic equations by inspection, taking square roots, factoring, completing the square, and the quadratic formula, as appropriate to the initial form of the equation (limit to real number solutions).

**MGSE9-12.F.IF.7a** Graph quadratic functions and show intercepts, maxima, and minima (as determined by the function or by context).

 **Criteria: 3 out of 3**

What are the solutions of the following quadratic equations?

1. m2-5m-14 = 0
2. b2+b-20 =0
3. 2a2-15a+18= 0

 **Day 5:**

 **Formative Assessment 3**

**MGSE9-12.A.REI.4a** Use the method of completing the square to transform any quadratic equation in x into an equation of the form (x – p)2 = q that has the same solutions. Derive the quadratic formula from ax2 + bx + c = 0.

Criteria: Show all your work!!

Mastery: 8 out of 8

1 point will be awarded per step right

**Finding the vertex by completing the square**

Complete the square and find the vertex. Tell whether the vertex is a minimum or maximum.

1. Y = x2+16x+24
2. Y= x2+5x+7

**Brief analysis: students 3,6, and 14 are pretty slow in term of managing their time to complete their assessments. They don’t have lower grade because they do not grasp the concept but it does take them more time compare to my average students. For the 2 formative assessments I have chosen, each student has been provided with a graphic organizer so that on each step they can accurately check their work and also it does allow me to see which step need to be reviewed or retaught. The first assessment that I did choose focus on solving quadratic equation and it does help review everything that has been taught from day 1. Basically the student needs to know how to factor quadratic whether using the quadratic formula,completing the square, the ac method, or the triangle method. Solving quadratic equations will just be an application of factoring quadratics. In general, this assessment helps me see how the students have mastered the concept of factoring and if a remediation is needed. Assessment of day 5 also focus on a specific task which is factoring by completing the square. The day before, the students had a hard time mastering that concept. I wind up reteaching each and instead of using 6 steps, we did combine to 3 steps which was quite successful. One way I analyze my data is for me to be able to see their area of struggles. Those grades do not reflect actually their achievements in my class. By that I mean some of the students may get an answer right but unless he /she does follow the steps to explain he or she would not get a full credit. It does help them to build up a logic in their reasoning. For example some students can visualize solving equation and give you the answer but does not know which properties are involved.**