**2016 High School Mathematics SOL Revisions Activity**

1. Boxplots (box and whisker plots) are included in the Statistics strand of which grade level/course? (circle one)

1. Algebra I
2. Grade 8 Mathematics
3. Grade 7 Mathematics
4. Algebra II

2. Which of the following constructions are included in the Geometry Standards of Learning? (circle all that apply)

1. inscribed and circumscribed circles of a triangle
2. a perpendicular to a given line from a point not on the line
3. a tangent line from a point outside a given circle to the circle
4. an equilateral triangle, a square, and a regular hexagon inscribed in a circle
5. an angle congruent to a given angle

3. Variation, standard deviation and z-scores are now included in SOL \_\_\_\_\_\_\_\_\_\_ .

4. In the Geometry Standards of Learning, the geometric transformation of rotation is limited to the angles of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on a coordinate grid where the center of rotation at the origin. Dilations are limited to those from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the coordinate grid.

5. The Algebra I Standards of Learning do not include which of the following? (circle one)

1. adding radical monomial expressions
2. subtracting radical monomial expressions
3. multiplying radical monomial expressions
4. dividing radical monomial expressions

6. In the Algebra I Standards of Learning for 2009, students had to simplify certain cube roots. They still do in the 2016 standards. What types of cube roots will students simplify under the 2016 standards that they may not have had to do under the 2009 standards?

7. In the Algebra II Standards of Learning, identify the 2016 AII.7 bullets that are a result of revisions to the standard? (circle all that apply)

1. domain, range, and continuity;
2. intervals in which a function is increasing or decreasing
3. extrema
4. zeros
5. intercepts
6. values of a function for elements in its domain
7. connections between and among multiple representations of functions using verbal descriptions, tables, equations, and graphs
8. end behavior
9. vertical and horizontal asymptotes;
10. inverse of a function
11. composition of functions, algebraically and graphically.

8. Students may need to simplify an expression that requires rationalizing denominators in which two high school SOL tested courses?

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1. Boxplots (box and whisker plots) are included in the Statistics strand of which grade level/course? (circle one)

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2. Which of the following constructions are included in the Geometry Standards of Learning? (circle all that apply)

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**AII.11 and AFDA.7**

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**a fixed point**

**90°, 180°, 270°, or 360°**

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**2009: Cube roots of whole numbers**

**2016: Cube roots of integers**

7. In the Algebra II Standards of Learning, which of the following function concepts are new to the 2016 standards? (circle all that apply)

1. domain, range, and continuity;
2. intervals in which a function is increasing or decreasing
3. extrema
4. zeros
5. intercepts
6. values of a function for elements in its domain
7. connections between and among multiple representations of functions using verbal descriptions, tables, equations, and graphs
8. end behavior
9. vertical and horizontal asymptotes;
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**Geometry and Algebra II**