CCSS Algebra 4 AA6: Polynomials Review

**C Level Questions**

1. Simplify each polynomial expression. Write the solution in Standard Form:

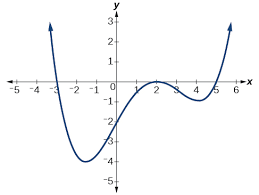
a. b.

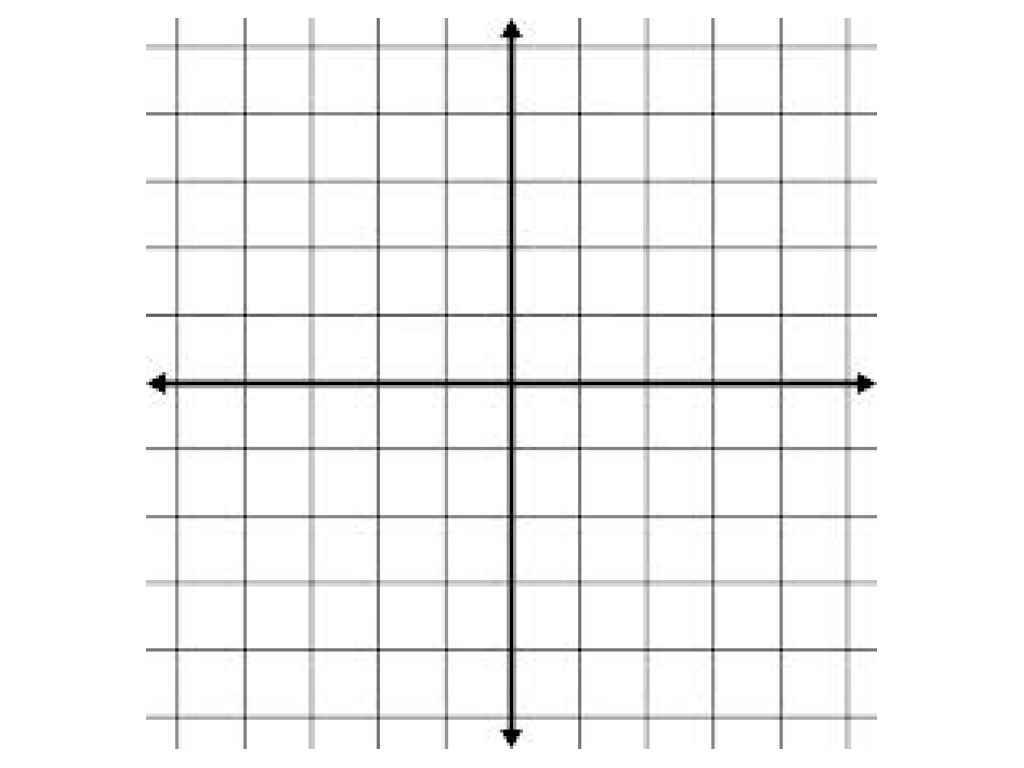
c. d.

2. Simplify each rational expression fully.

a. b. c.

3. Write a polynomial function in Factored Form for each description below:

a. x-intercepts at (3,0), (4,0), (5,0) and a degree of 5. b. 

4. a. Factor .

b. Identify the x-intercepts and state the multiplicity of each root.

c. Use the x-intercepts and multiplicities to sketch the graph of .

d. Describe what happens to when

and when .

**A/B Level Questions**

5. The polynomial has a leading coefficient of -10, a constant of 120 and the root with multiplicity one is 3. Find a, b, and c.

6. Consider the function . Explain why when and when .

7. a. Show that

b. Show that

c. Hence, what does ?

d. Hence, what does = ?

8. Solve the equation for x. Check your solution(s).